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THE KANSAS CITY

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## ORIGINAL CONTRIBUTIONS.

### HYDROTHERAPY—THE ONLY RATIONAL TREATMENT OF TYPHOID FEVER.\*

BY E. J. CHASSAGNE, A.B.; M. D., KANSAS CITY, MO.

The first factor in the successful treatment of typhoid fever is the proper nourishment of the patient; the second is to reduce the temperature without debilitating the patient; and the third to remove complications.

The modern therapist does not believe with our fore-fathers that digestible food instead of being beneficial, increases the danger by raising the temperature. The theory of starving fevers is a thing of the past and to Graves belongs the honor of being the first to call the attention of the medical world to this error; he proved conclusively that the want of food was not a blessing but a curse, which always develops complications and unfavorable symptoms by inducing excessive prostrations. Those that claim that food ought not to be given because there is no hunger, perhaps will advise also to let the urine accumulate in the bladder *waiting for the patient to evince a desire of passing water.*

The diet should be liquid, and neither fatty nor pure albuminous food should be given. The author relies entirely on peptonized milk in small quantities, given often, light wines and cognac if necessary, clear meat broths are sometimes well borne, and then ought to be given alternately with the milk. Fruits ought not to be allowed under any circumstances. Solid food during the course of the fever is out of the question; some authorities, among them Flint,

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believe in giving solid food at the beginning of convalescence, this plan is unwise and is condemned by my old professor Dr. Jaccoud of the faculty of Paris, who stand prominent as one of the most brilliant pathologists of the century. Prof. Jaccoud says:

"The administration of meat at this period always produces increase of temperature (Fibris carnis) which ceases as soon as the meat is discontinued." According to his criterion, meat ought not to be given until at least eighteen days after convalescence.

*Abortive Treatment.*—Under this head we find among the great many therapeutical agents suggested, calomel, iodine, the mineral acids, aconite, etc.

The treatment of typhoid fever by large doses of calomel according to the method first employed in Germany by Schonlein and Wunderlich is unreliable and dangerous; it might be beneficial in the primary stage (first week) when the bacteria is vegetating in the intestine, but after this time is useless and will in the majority of cases do more harm than good by increasing the local intestinal lesions and weakening the patient. Pfenfer and Neimeyer who are two of the most enthusiastic upholders of this treatment are very careful to not claim great results unless the calomel is given during the first five days of the fever. I ask now where is the physician that can give a correct diagnosis of this fever during the first five days. The impossibility of a correct diagnosis during the first week is a known fact to every practitioner.

During an epidemic of typhoid fever in Paris in 1871, during the siege I saw the calomel treatment tried, in over two hundred cases the rate of mortality was 60 per cent and I do not remember of a single case where the course of

the disease was shortened or benefited by this heroic treatment; this much for the so called abortive properties of calomel.

Drs. Willebrand and Liebermeister recommend iodine in combination with the iodide of potassium as follows:

R Tr. iodini..... $\mathfrak{z}\text{i}$ .  
 Potas iodid..... $\mathfrak{z}\text{ii}$ .  
 Aqua qs.....ad..... $\mathfrak{z}\text{i}$ .

M. Three to four drops every two hours in a wineglassful of water.

They claim that after one week by using this formula the tongue will become moist, marked remissions will take place and that a general improvement of all the symptoms with recovery will soon follow. In this country the Bartholow's formula (iodine and ac. carbolici) has been used in some cases with gratifying results. The number of cases where Liebermeister's prescription has been administered to the exclusion of all other medicines is so small that further trial is necessary before an estimate can be formed; the same can be said about Bartholow's.

Under the head of Specific treatment of Typhoid fever "Prof. Van Eman in the Kansas City MEDICAL RECORD for October publish an eulogy on the action of the mineral acids. He claims to have found a specific and gives a report of six cases treated entirely by hydrochloric acid. In five of the cases no complications, temperature 103 and recovery before three weeks. With due respect to Dr. Van Eman's opinion I must say that the cases mentioned could not have been typical cases of this fever; undoubtedly they were cases of the abortive form and that accounts for the quick recovery. A genuine case of typhoid will always last fully three weeks and often more, acids or no acids.

Dr. Loomis says: "There is no means by which the poison can be counteracted or neutralized after once in the system. The duty of the physician is to guide as much as possible the disease to a favorable issue, as a definite period must elapse before this result can be accomplished.

*Typhoid has to pass through certain stages*

*and the physician cannot shorten its duration by a single day."*

The abortive form is very common in this locality, and I have seen a great many cases in the last five years.

The hydrochloric acid ought to be administered not on account of any influence in the course of the fever or any action on the person but because it helps digestion, relieves the thirst and checks the bowels, all this to the great comfort of the patient. Prof. Thomson of the University of the city of New York says on the use of the mineral acids in typhoid: "Hydrochloric acid is absent in typhoid; it has been demonstrated by experiments that the stomach is more wasted in this fever than in any other. This acid combined with pepsin should therefore always be given in typhoid." Not a word about specific action.

Prof. Kunze of the University of Halle says: "The mineral acid have no more specific action on the typhic poison than the famous chlorine-water of olden times; acids ought to be prescribed because of their absence in this disease.

The author always uses the following formula:

R Ac. hydrochlor. (C.P.).....gtt. xxx.  
 Sy. Auranti.....  
 Aqua āā..... $\mathfrak{z}\text{i}$ .

M. Teaspoonful every two hours in a wineglassful of water,

This makes a pleasant drink that will always quench the thirst and give the stomach the necessary quantities of acid to accomplish digestion. I always discontinue when constipation results and never prescribe it when the bronchial catarrh is very intense.

The treatment of typhoid fever by aconite inaugurated in France (I think in 1875) by Drs. Deshayes and Levasseur has proven to be a sad disappointment in the hands of those practitioners that have tried it.

*Antipyretic treatment.*—The antipyretics are divided into two groups. 1. Those which reduce temperature by chemical action (quinine, antipyrine, etc.) and those which reduce temperature by the abstraction of heat (hydrother-

apy). The chemical antipyretics, quinine the salicylates, antipyrine, acetanilid, kairin, antikamnia and thallin are contra-indicated in typhoid as they are cardiac depressants. Cold water the great and only antipyretic used by Dr. Currie long ago fell into disuse until Brand of Stettin astonished the medical profession by the report of his wonderful success in typhoid fever. As we all know the great danger in this fever lies on heart failure from exhaustion, now cold increases the muscular strenght of the heart, tones up the nervous system, stimulates the secretory glands and allows perspiration; this explains the wonderful results under the cold bath. The cold water can be used in three different ways, the bath, the cold pack and the oblations; of these the only one that can reduce the temperature is the cold bath. According to the Board of Health of N.Y. the mortality in that city by typhoid fever from 1876 to 1885, using the chemical antipyretics, reached 41.28 per cent; under the same treatment the mortality in the German army reached 27 per cent and in the French army 31 per cent; now Brand shows in his last statistics that by using the cold bath the mortality has been reduced in the German army to less than 4 per cent. Why this method is not more generally used in this country it is a puzzle for me. Some physicians in Europe have lately claimed as good results for the expectant treatment, but the statistics carefully compiled in different cities deny the assertion; in Kiel, the mortality was 27 per cent; in Leipsic 18 per cent; in Vienna 20 per cent; in Berlin 18 per cent; in Paris 32 per cent; and in forty five cases treated at the Roosevelt Hospital N. Y., the percentage was 10.

The author does not exactly follow the directions of Brand and prefers to use the warm bath gradually cooled down to 60°, it is to be cooled down by cold water poured in and the water in the bath is kept in constant motion. The duration of the bath should be not under fifteen minutes nor over thirty; in the majority of cases four baths in the twenty-four hours answer the purpose, in grave cases more baths will be necessary. I give a bath every time the temperature reaches 102°. The patient ought to take

his time in leaving the bath as he cannot take cold; thoracic complications are not produced by chilling but produced by the fever and statistics show that they are more frequent under chemical antipyretics than under the cold bath. If on returning to bed shivering takes place the patient ought to be gently rubbed and a hot bottle placed at his feet. In cases where intestinal hemorrhage appears ice bags to abdomen instead of baths and ergotin hypodermically in doses of two to five grains according to the case.

Typhoid fever in children is not so fatal as in adults and by using hydrotherapeutic measures we ought to save most every case.

In conclusion I will say that chemical antipyretics ought to be left aside as the only good they accomplish is that patients die with a normal temperature. The statistics show cold facts and ignorance is the only excuse for not using hydrotherapeutic means.

## REFERENCES.

- |   |                           |
|---|---------------------------|
| Jaccoud:  | Medical Pathology.        |
| Niemeyer:   | Practice of Medicine.     |
| Kunze:  | Practice of Medicine.     |
| Moynac:   | Medical Clinic.           |
| Sanchez-Ocana:  | Medical Clinic.           |
| Loomis:   | Practice of Medicine.     |
| Santero:  | Medical Clinic.           |
| Pepper:   | System of Medicine.       |
| Robert:   | Medical Pathology.        |
| Porto:  | Medical Pathology.        |
| Trousseau:  | Therapeutics.             |
| Rabuteau:   | Therapeutics.             |
| Thomson:  | Lectures on Therapeutics. |
| Ringer:   | Handbook on Therapeutics. |
| Annual of the Universal Medical Sciences, 1888, '89, '90. |                           |
| Gazette Hebdomadaire.                                     |                           |
| Cronica Medico-Quirurjica de la Habana.                   |                           |

## ENURESIS.\*

BY GEO. W. DAVIS, M.D.

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Enuresis or incontinence of urine is a symptom of a diseased condition sometimes present in

\*Read before the Academy of Medicine, Kansas City, Mo.

adults, yet a brief sketch of juvenile incontinence is all that our limits will admit.

By enuresis is understood "the involuntary evacuation of normal urine in childhood, the urinary organs being otherwise normal.

By this definition is excluded all those conditions which are associated with increased desire to urinate, and also diseased conditions of the urinary organs.

Without going into the minutia of the mechanism of urination, it may be briefly stated that the urine is retained in the bladder by the muscular fibres which act as a sphincter.

In infancy the resistance of the sphincter is wanting and the slightest contraction of the bladder is sufficient to expel the urine. Such a condition is physiological among infants.

At the end of the second year the ability to hold the urine back at will is established. But supposing after that period the child is not able to retain its urine, the urine and urinary organs being healthy, then the child is said to be suffering from Enuresis. In the earliest period of childhood an undue frequency of passing water is often to be observed in both sexes, more commonly in boys than girls, yet this is an affliction that may appear suddenly in the latter life of the child, as for instance when the child is much run down or debilitated.

Usually as age advances, this infirmity lessens or disappears, rarely lasting beyond puberty.

**Etiology.**—The causes can be summed up under three heads. 1. Those claiming that it is due to various enfeebled conditions, as general debility anemia, scrofula, rachitis, etc., etc. 2. Those claiming that it is due to an imperfect development or congenital weakness of the sphincter muscles. 3. Those claiming that it is a neurotic trouble. In the past, the first of these views was considered of first importance, when anemia, chlorosis and kindred affections were supposed to be the cause of the most of the diseases incident to childhood, but the fact of the co-existence of any of these conditions does by no means bring them into causal relations with it.

Not infrequently incontinency is found in

well-nourished and healthy children; precocious development and extreme mental activity, predisposing to disturbed sleep and seeming to favor the occurrence of incontinence.

Among those who claim congenital weakness as a cause is Bartholow, who considers relaxation of the vesical sphincter one of the most prominent etiological factors. This ascribed cause is probably applicable to certain cases.

Trousseau and Bretonneau consider enuresis a neurosis of the neck of the bladder and Uitzmann concurs in this opinion, so far at least as it refers to enuresis nocturna.

He believes that "there is a disproportion between the innervation of the detrusor and that of the sphincter, and that the sphincter is very imperfectly innervated. Since this condition is normal from the expiration of the first year, until the completion of dentition, so in all those cases in which the bed-wetting does not cease in time, enuresis represents the continuance of this infantile condition. That enuresis consists only in an imperfect innervation of the sphincter of the bladder is shown by the results which are attained by electrical treatment. These are cases, namely, which are already cured after the first faradization of the sphincter and remain so henceforth.

Such a therapeutic result can only be explained by imperfect innervation and never by imperfect development of the sphincter.

**Symptoms.**—Enuresis occurs in most children between the third and tenth years. Sex has nothing to do with this condition; the assertion that boys are more frequently affected than girls is more apparent than real, the parents of girls taking care to conceal their condition, especially when the patient is advanced in years, knowing that it is a disease that usually disappears at puberty.

Enuresis occurs generally at night, the urine being passed unconsciously during sleep, and this forms the most serious symptom.

Occasionally the incontinency occurs only during the day, and then usually after vigorous muscular effort, like running up stairs, skipping the rope, or as sometimes happens, after laughing or coughing.

In some cases, involuntary urination takes place almost continuously, the patient being wet night and day. In all these forms, the urine is voided in a stream and not drop by drop, the outflow being absolutely beyond control. The flow of urine is determined not by inability on the part of the bladder to retain a small amount but by its undue readiness to contract, so that the act of micturition can be executed while the will is in obedience through sleep.

Treatment.—This may be general and local and I might add moral.

For those needing tonics, the syrup of the iodide of iron might be tried. Cold sitz baths are beneficial.

But when the cause of the incontinence is found in a weakness of the sphincter, an attempt should be made to strengthen the weakened muscle, and that it seems to me is best accomplished after the method of Ultzmann.

The objection heretofore to the use of electricity has been that it was either applied too indirectly or the opposite. When the urethral electrodes were introduced into the urethra of boys, it could scarcely be performed without injury. It frequently set up urethritis and cystitis; conditions which in enuresis can only have a harmful influence.

The idea of Ultzmann is to stimulate the sphincter vesica through the rectum. He has a special rectal electrode made for that purpose, but the ordinary electrode usually employed in that region is sufficient for all purposes. In boys, one pole is placed in the rectum and the other pole is applied to the perineum; in girls, one pole is placed in the vagina and the other one in the crease of the buttocks. The Faradic current is the one used, the strength to be increased gradually, the sitting lasting from five to ten minutes, and the application to be made daily or every other day, the patient lying stretched on the sofa during the seance. The treatment lasts about a month, although when relapses occur it must be continued still longer. When the expulsive effort of the bladder is to be controlled, belladonna administered persistently seems to fulfil every indication.

Small doses suffice at first and may be given,

commencing with perhaps one-tenth of a grain of the extract, if the child is very young and increased to the maximum of tolerance. Still better than the belladonna extract is atropia which is more certain in its effects and is exceedingly well borne by children. The following formula may be used:

R Atropiae Sulph.....gr. i  
Aque.....℥i

Sig. One drop for each year of the age of the child, given at 4 and 7 o'clock in the evening.

In those cases when there is incompetency of the sphincter, small doses of nux vomica and ergot may be tried.

In conclusion, the moral treatment should be one of encouragement. Make the child as cheerful as possible and assure him that he is suffering from something beyond his control.

#### ELEVEN OPERATIONS FOR CATARACT.\*

BY W. C. TYREE, M. D., KANSAS CITY, MO.  
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Nearly all the literature on the subject of cataracts for the past two or three years, has been confined to reports of series of operations numbering from ten to one hundred each, by some of the leading oculists of the country, for the purpose of testing the comparative merits of the simple extraction, and that combined with iridectomy. There is still some difference of opinion as to the safety of the two operations. There are those, however, who were formerly of the opinion that the iridectomy method was the best, all things considered, who have come to regard the simple operation suitable only under certain favorable conditions, such as a perfectly free iris, when there is no tendency to prolapse, etc., and where synechia exists to any degree they believe the combined extraction to be preferable. I have found it as a rule difficult to deliver the lens before iridectomy without producing prolapse of the iris, and have, as a consequence, made the iridectomy simply to prevent this disagreeable tendency.

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Knapp, in the report of his third series of one hundred operations, says: "Instead of finding an iridectomy desirable in the greater number of cases, as some operators have done, during the last years, I have constantly reduced the number." There will always be special indications for iridectomy, but I do not think that I shall ever care to practice simple extraction as a rule. Flushing the anterior chamber with antiseptic fluids, which had been practiced to a considerable extent, seems to have lost favor, for any injection whatever, produces too much irritation. It is regarded as the best practice now, simply to use cleanliness as complete as possible. It would be impossible to detail here the numerous operations for cataract, and I will content myself with pointing out the actual progress which has been realized in this direction. The first great improvement consisted in abandoning the old flap section which passed through the cornea, near its margin, and, bringing them out at the sclero corneal junction, Jacobson, etc., further facilitated the exit of the lens and prevented strangulation of the iris, by the excision of a large piece of that membrane. These modifications were the starting points in all the progress since made.

Von Graefe, in 1866, while maintaining the peripheric section and the iridectomy of Jacobson, urged that the flap method should be abandoned and the linear, as far as possible, be adopted in the incision. The resulting wound being much less inclined to gape, enables the globe to be fixed during the whole time of the operation, and the section to be made upwards so that the artificial pupil can be covered by the upper lid. Within the last few years the iridectomy has been abandoned by many, on the ground that there is a better standard of vision restored, besides the symmetry of the pupil being preserved, there is less confusion of light, and for cosmetic reasons. The senile, or that form of cataract that comes on about the time general senile changes take place, is the most interesting. Through the fully dilated pupil of elderly people can be seen, toward the periphery of the lens, midway between its edge and anterior surface, a series

of small opacities forming a circle from which spring little points which advance but a short distance toward the poles. At the same time oblique illumination will show the fibres which go to form the anterior star-like arrangement, while there will also be a general blue reflex from the anterior layers. This very common senile change is not progressive, and does not always conduce to cataract, yet there is a period of time which is not definite, between the transition when it does occur. Hence, it is important for the surgeon to keep silent concerning certain slight, hazy appearances of the lens. By so doing he will avoid alarming the patient with the prospect of cataract, when it may never, or at least for years may never develop.

We may damage our reputations by declaring, that, in a case just beginning a fair amount of vision can be preserved for years, or even months, when in the space of a few weeks the opacity has become general. It may be the same if an opposite opinion be given and the date of the maturity of the cataract be fixed within a more or less brief period. It is better to say boldly, that, in the present state of our knowledge we are not justified in pronouncing with any certainty as to the course the disease will run. So long as the iris projects an apparent shadow upon the lens, it is not ripe, or ready for extraction. Forester has devised a method of hastening the maturity of cataracts which has been practiced with a degree of success. He performs an iridectomy, and with a spud or with the back of the keratome makes pressure on the cornea, and needs the anterior capsule. This procedure seems to bring about changes that develop the cataract sometimes within a few weeks. For the after-treatment of cataract operations I give the palm to the gold-beaten skin plaster, placed over the lid so as to hold it securely fast to prevent reaction of the lid and consequent friction over the wound. This is particularly serviceable in those frequently occurring cases in old people, who have such a persistent tendency to wink, amounting in many instances to an uncontrollable spasm of the lid, sufficient sometimes to force out the

vitreous through a gaping wound. This transparent plaster holds the lid perfectly quiet.

The operations which I wish to report to you this evening are those which I have performed during the last twelve months, some of which have resulted in a better average of vision than is usual.

CASE 1. November 3, 1889, John C. Martin, aet. 55. Extracted cataract from the left eye. Vision with suitable compound lens,  $\frac{2}{3}$ . Patient said he could read the newspaper as easily as he ever could in his life.

CASE 2. Operation on the right eye of the same patient, Mr. Martin, May 11, 1890. The success of this operation was equal to the first.

CASE 3. John Colgan, November 3, 1889. Operated on left eye. After secondary operation for laceration of lens capsule, May 11, 1890, vision  $\frac{3}{8}$ . Slight synechia rendered iridectomy necessary.

CASE 4. Thomas Langdon, aet. 69. Operated on right eye, February, 17, 1890. Secondary operation, May 11, 1890. Arcus senilis very great in this eye, and seemed to be increased somewhat by the operation; vision good.

CASE 5. Goode; German, Had cataract removed from right eye three years previous to November 19, 1889, when I first saw him. About three weeks previous to this time, while chopping wood, he was struck in the operated eye by a flying stick of wood which produced serious rupture of the cornea near its upper margin, and finally destruction of the eye. Removed this stump November 19th and November 25th operated for cataract in left eye. He proved to be a very unruly patient and strained very hard. When the section of the cornea was finished a gush of vitreous took place. Healing, however, was good, but vision only sufficient to allow him to walk around without assistance.

CASE 6. Nicholas Caranaugh, December 24, 1889. Left eye hypermature cataract with iris firmly bound down to lens capsule. Vitreous fluid with tension greatly reduced. He could, however, distinguish light. Unfortunately this was his only eye, its fellow having been previously destroyed.

The patient and his friends insisted on an attempt being made to give him better vision. I insisted as firmly as they that there was hardly a possibility of doing him any good, but remembering that we are sometimes agreeably surprised to find a better condition of the fundus than we had anticipated, and that we have had the pleasure of obtaining a fair amount of sight in some of these doubtful cases, I undertook to operate, November 25, 1889. After repeated unsuccessful attempts to extract the lens, it was finally abandoned without any good result to the patient.

CASE 7. Wm. T. Dowling, aet. 63, cataract of the left eye extracted, January 25, 1890. Vision  $\frac{3}{8}$ .

CASE 8. Mrs. Burns, aet. 60. Operated on left eye March 16, 1890. Vision excellent.

CASE 9. Wm. Barry, May 16, 1890. Vision good. Opaque capsule remained which interfered with vision; when removed vision no doubt will be improved.

CASE 10. Henry Lindenberg. Operated on right eye May 11, 1890. Vision excellent.

CASE 11. Mary Walker, aet. 65. Operated on right eye, June 12, 1890. Vision  $\frac{3}{8}$ .

## CORRESPONDENCE.

### POINTS GLEANED DURING THE MEDICAL CONGRESS AND LATER FROM THE BERLIN CLINICS.

*To the Kansas City Medical Record:*

At this late date of course the principal points of interest from the X.th International Medical Congress are well known to your readers but a few points of the more special papers I present to your attention. I only attended the three general sessions, and section 7 on surgery which was partly held at the amphitheater of the polyclinic.

Of the papers read at the general sessions, two stand brilliantly forth to my memory; Sir Joseph Lister, on *The present position of anti-*

septic surgery, and Koch on *Bacteriological observations*.

After the burst of applause, which greeted Sir Joseph Lister, on ascending the rostrum, he made a most telling address, which aroused unbounded enthusiasm, and I give you an abstract of his most prominent experiment.

He began by alluding to the International Congress held in London in 1881, when Koch demonstrated his then new method of cultivating microbes upon solid media. The illustrious Pasteur was present at the demonstration, and at its conclusion exclaimed: "C'est un grand projet, Monsieur!" How vast have been the extensions of our knowledge, which have resulted from that great step in advance. Of these none perhaps have been more striking than Koch's own brilliant discovery of cholera microbe, which acknowledgment from an English surgeon of undoubted repute was received with cheers.

Referring to the experiments of Metchnikoff on the green frog with the anthrax bacillus; he gave a history of the results and brought before us two samples of the kind of evidence upon which the phagocyte theory rests. Accepting it, we can explain the relations of micro-organisms to wounds. He referred to his own experiments and the powerful anti-bacterial agency exerted by a blood clot within a body. By means of this same theory we can account for what would otherwise have seemed to me incomprehensible—the use, without evil consequences, of silk ligatures which have not been subjected to any antiseptic preparation. But there must be a limit to the thickness of the thread. No one, I imagine, would feel justified in leaving in the peritoneal cavity an unsterilized cord as thick as a finger. Mr. Bantock, whose remarkable series of successful ovariectomies may seem to justify his practice, does not, I believe, prepare his ligatures antiseptically: and I understand that he uses, for tying the pedicle of the tumor, silk twist of so strong a nature that it can be twisted to bear the needful strain with a diameter of only about  $\frac{1}{30}$  inch. But it would surely be wiser to sterilize even so slender a cord.

The success in abdominal surgery achieved by Bantock and Tait without, as is said, the use of antiseptic means, proves a stumbling block to some minds. But in truth the practice of these surgeons is by no means conducted without antiseptic precautions, nor would they, I am persuaded, desire that such an impression should prevail. Both are scrupulously careful in the preparation of their sponges, both observe the strictest cleanliness, both wash out the peritoneum to get rid of coagula, thus avoiding the risk of sepsis of residual clots. The drainage of the peritoneum is another antiseptic measure, and Mr. Bantock, I am informed, has the sponges, which absorb the serum, wrung out of sulphurous acid and changes them very frequently. Bantock boils the water before using it, but I would advise as more effectual an extremely weak solution of corrosive sublimate, such as one in ten thousand, which as Koch has taught us, may be implicitly trusted as aseptic, while it is not appreciably irritating and involves no risk in mercurial poisoning. In general surgery the direct application of strong antiseptic solutions is not attended with the same disadvantages as in operations in the peritoneal cavity. My practice for some time past has been to wash the wound, after securing the bleeding parts, with a pretty strong solution of corrosive sublimate (1:500) and irrigate with a weaker solution (1:4000) during the stitching; and I have had no reason to complain of the results. To this, however, I must make one marked exception. When applied to the healthy synovial membrane of a joint, the 1 to 500 solution produces inconvenient irritation; and therefore when opening an articulation, as for suturing a transverse fracture of the patella, I abstain from the washing, and, as a substitute, have hitherto irrigated during the whole operation with the weak solution (1:4000). And yet I must confess I have for a long time doubted whether the washing or the irrigation is really necessary. As regards the spray, I feel ashamed that I should have ever recommended it for the purpose of destroying the microbes of the air.

There are few more beautiful things in antiseptic surgery, as contrasted with the results of

former practice, than to see the abundant purulent contents of the pleural cavity give place at once to a serious effusion rapidly diminishing from day to day till, the opening being allowed to close, the pleura, restored to its healthy condition, resumes its normal functions of absorbing gases and as the natural vacuum within it becomes re-established, the atmospheric pressure blows up the contracted lung and brings it again into contact with the chest wall unimpaired in its dimensions. Such course we had witnessed before the days of the spray and such we continued to see during its use. If then no harm resulted from the admission day after day of abundant atmospheric organisms to mingle unaltered with the serum in the pleural cavity, it seems to follow logically that the floating particles in the air may be disregarded in our surgical work, and if so, we may dispense with antiseptic washing and irrigation; provided always that we can trust ourselves and our assistants to avoid the introduction into the wound of septic defilement from other than atmospheric sources.

Since we abandoned the spray, three years ago, we have been careful to compensate for its absence, not only by antiseptic washing and irrigation, but by surrounding the seat of operation with wide spread of towels wrung out of an antiseptic solution. But if besides the spray we give up all washing and irrigation of the wound, our vigilance must be redoubled. I have not yet ventured to make the experiment on a large scale, though I have long had it in contemplation. It is a serious thing to experiment upon the lives of our fellow men. But I believe the time has now arrived when it may be tried, and if it should succeed then perhaps may be fulfilled my early dream. Judging from the analogy of subcutaneous injuries, I hoped that a wound made under antiseptic precautions might be forthwith closed completely, with the line of union perhaps sealed hermetically with some antiseptic varnish. And bitter was my disappointment at finding that the carbolic spray used as our antiseptic agent induced by its irritation such a copious effusion of bloody serum as to necessitate an opening for its exit.

Hence comes the drainage of wounds. But if we can discard this application of an antiseptic to the cut surfaces, using sponges wrung out of a liquid that is antiseptic but unirritating, such as the 1-10,000 solution of corrosive sublimate, we may fairly hope that the original ideal may be more or less nearly attained. Since its use less drainage is required; on small wounds we omit it entirely, on larger ones we only use one short tube of small calibre. But it would be a great thing if we could discard it altogether; without applying the very firm elastic compression adopted by some surgeons, which, besides involving the risk of sloughing of parts of low vital power, with the chance that it may after all fail in its object, proves often extremely irksome to the patient.

Now he continues to speak of external dressings, condemns the use of cotton wool sterilized by heat as used by some surgeons, being impracticable for the ordinary practitioner and recommends the cyanide of mercury as the most important ingredient antiseptically, as prepared by Dunstan and reported in the *New York Medical Record*, 8 months ago. Hoping through this paper to stimulate every one to more thorough earnestness in pursuit of the great objects of antiseptic surgery, he closed it under great applause.

Prof. Koch followed with a very able paper on "*Bacteriological Investigations*," which was received with general satisfaction and well merited applause. As it is of great scientific value I will give you later a translation and refer now only to a few points.

After referring to the great advance made in bacteriology by improvements in optical instruments, thus leading to new discoveries and classification of bacilli and bacteria, he also spoke of some disappointments made in the much hoped for discovery of the causation of infectious diseases. He reported his late investigations of tuberculosis, the influence of light, warmth, cold, dryness and chemical substances in the tubercle bacillus. One of the most important factors is light; sunlight will kill the tubercle bacilli in a very short time. even daylight will kill them in 5 to 7 days if the cultures

are kept near the window. It is important that the investigator of infectious diseases should know that bacteria can only augment in moist condition, that is in the presence of water or other fluids, and that they cannot go into the air on their own volition. Therefore bacteria can only in the form of dust be carried into the air and only such ones which in dry condition remain alive for some time, can be carried. But they *never* augment in the air as was formerly thought. We don't know anything yet about the germs of influenza, whooping cough, yellow fever, rinderpest and many other unquestionably infectious diseases.

E. VON QUAST.

(To be continued.)

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## SOCIETY PROCEEDINGS.

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### KANSAS CITY ACADEMY OF MEDICINE.

OCTOBER 24, 1890.

Meeting called to order at the Midland hotel, by the president, Dr. Crowell, Dr. VanSweringen, secretary pro tem.

Dr. W. C. Tyree read a paper entitled "Eleven Operations for Cataract." Published in the current number of the RECORD. Dr. Fryer apologized for not being earlier. He did not hear the entire paper, but the subject of senile cataract is certainly a very important one, and the extraction of a senile cataract is a very difficult matter. Few gentlemen who have never undertaken it realize what it is. You are not operating on something that is quiescent; the patient is conscious and you are operating on an organ that is moving during the operation. At any step the operator fears the escape of the vitreous from the contraction of the muscles making pressure upon the globe thus forcing it out. The delicacy of the operation no one can appreciate until they attempt it. The operation that the doctor does we suppose is altogether in the cornea and that is the operation that oculists at the present day are doing. As long ago as 1746 Daviel began the operation in the cornea and he incised the lower

two-thirds of the cornea and let out the lens from below.

Prof Von Graefe, in 1865, did what is called the linear operation; the puncture and counter-puncture was made in the sclera, the upper line of the incision was in the sclera or at the limbus. He had some unsatisfactory results, and he began to modify it, but no great modification was made until a few years ago, when Wecker and Panas began to operate in the cornea alone. A large part of the operators are operating without excision of the iris. He has seen the results of some of the best operators living; sometimes they are very good; often they are very bad. He saw several eyes a year ago operated on by one of the best operators living, and should feel very uncomfortable if they were our cases. We mean that this operation without iridectomy has this to contend with: There may be an expulsion of the iris before the incision closes. The only way to do then is to cut the iris. We believe the operation of the future is that with a preliminary iridectomy. There are several reasons why we would urge that. Firstly, we do not know how the patient is going to behave and if we do a preliminary operation first we can learn something of him. Secondly, when we come to extraction we have very much less to do. We have removed the risk of iritis and reduced the risk of the operation. We have done this several times and have two cases now in the Sisters' hospital. In the first one the eye did not redden at all. The other one is slightly reddened to-day, this being the fifth day. One has a point of interest which we would like to mention here. When we did the preliminary iridectomy in the old lady she became insane. It took four nurses to keep her in bed. Cases of this kind have occurred before this and have been reported. Of course this is a rare occurrence. We believe this operation for cataract will be done after a preliminary iridectomy. It is a very rare thing that iridectomy makes an iritis, but extraction, where iridectomy is done very frequently makes it. We are very glad that the doctor has had such good results. The vision is extremely good.

Of course we can hardly expect in these old people that they can have this acuity of vision.

Dr. Kyger: I do not exactly understand this operation as stated by the essayist. I understand the old operation that Von Graefe used to perform, the linear incision and the preliminary iridectomy, but what the doctor terms the "simple operation," I do not understand.

Dr. Tyree: What we mean by the simple operation is an operation without iridectomy, whatever kind of incision you may make in the cornea. We make often the same incision in the cornea, only, probably a little larger. We have attempted the simple operation several times, but have had the iris prolapse, and have then gone ahead with the old operation. We enter the knife at the upper third, transfix the cornea and bring the knife out above, then take off a piece of the iris and extract the lens.

Dr. Kyger: There is another point, and that is hastening the ripening of the lens. If I remember correctly, there is an operation to ripen the lens which is made by simply puncturing it and letting a little of the aqueous humor into the lens, the irritation, etc., hastening its opacity. I presume that has been done away with and this taken its place.

Dr. Hardin: Do you prefer to operate in the cornea because of its non-vascularity?

Dr. Tyree: Yes, sir. In this way you get a perfectly bloodless operation. It brings the edges of the wound into better opposition and favors healing. As Dr. Fryer has intimated by passing the knife in the sclerotic sympathetic ophthalmia has been produced. We have found that our operations which have been freest from the sclerotic or conjunctiva have seemed to heal with less irritation, and, altogether done better.

Dr. Fryer: I think this is undoubtedly so, for there are large numbers of leucocytes in its lymph spaces. There is much less reaction if we keep within the cornea. For a number of years I have not let the upper part of any incision go quite to the scleral junction.

Dr. Binnie: I would like to hear Dr. Tyree's experience on the extraction of immature

cataract. I think you will find, as a rule, the best healing is in the regions that are absolutely bloodless regions. Hamilton pointed out the fact that we get the best healing after amputations when we elevate the limb and exert considerable pressure. In cases of laparotomy we get the best results in spare, anemic persons.

Dr. Tyree: Of late years we have been operating on cataracts much earlier than we used to. We have operate on some, and thought they got along about as well, where we were careful to cleanse the anterior chamber of all substance, as if they had been more mature. Wecker cites the case of a musician who was dependent upon his daily work for a living, where he operated before it was ripe with splendid results. We think where the nucleus is hard you can get it out and with it always some part of the soft material comes away. Then with a spud and lots of patience you can press it out piece-meal until you get the pupil perfectly clear of everything. The great objection to removing cataracts early has been the amount of irritation which was set up by the material which remained in the anterior chamber. Of course it is safer to have a mature cataract. Forster's method of ripening these cataracts seems to have gained greatly in popularity. It may be urged against puncturing the cataract that you are apt to have intense swelling of the lens. If you are careful with Forster's method you can do some good, but if you press too heavily you are liable to dislocate the lens.

With regard to preliminary iridectomy, there can be no doubt that it is the safest method that can be adopted. We have never known it to produce iritis, and, with ordinary care it is a safe procedure, and removes from the operation of extraction its worst feature, for we have always thought it was the bruising and irritation of the iris caused by the delivery of the lens which set up the after-trouble.

Dr. Hal. Foster: We would like to ask the essayist about the after treatment of cataract operations. While in New York last summer we saw Dr. Webster operate several times,

and his after-treatment consisted simply in putting a piece of cotton over the eye. Operators used to confine them to a dark room for some time.

Dr. Tyree: We do not think it necessary to confine them to a dark room, but we think it is better to bandage both eyes, for we have seen serious damage done after a very neat operation by a spasm of the lids. We generally bind the lid down with gold-beaten skin plaster, and leave the cotton on for 36 to 48 hours. The gold-beaten skin seems to stick very closely. Then, of course, enjoin strict rest in the recumbent position. We also use a little atropine in the after-treatment, but rarely until after the third day, unless there has been some trouble with the iris.

Dr. Parker: We were rather surprised when Dr. Mitchel wrote his paper on bandaging and claimed it as original, for Dr. Levis has done it for a number of years. We had a case of cataract which was very interesting. The lens had dropped back into the vitreous. When we made the incision, to our surprise it floated up into the wound. In this connection we would like to refer to an article by T. J. Tyner, of Austin, Texas, recommending a preliminary capsulotomy in cataract operations, claiming a much easier and quicker delivery of the lens where the capsule is previously lacerated. If this be true, perhaps it accounts for the readiness with which the lens in our case floated into the wound, for the capsule had already been torn.

Dr. Fryer: This matter of the lens being dislocated back into the vitreous, makes the extraction a very difficult one. Dr. Agnew invented an instrument called a bident, for this operation, which was begun by placing the patient on a high table on his face, and fastening the lens with needles; then, turning him on his back proceeded to extract it. The paper Dr. Agnew wrote on this brought out some criticism. His operation necessitated the wounding of the ciliary body.

We saw a case eighteen months ago, and reported it in *Alt's Journal*, of dislocation of the lens that occurred at the time or after an opera-

tion which we did for acute glaucoma. We say acute glaucoma—we saw it four weeks after the attack. When we saw it the man's vision was almost nil, and as his other eye was destroyed, we thought to give him this chance. We made a very smooth iridectomy, but on the next day we found his lens was floating in the vitreous, but, as stated in our paper, during the operation when the tension was taken off by letting out some of the aqueous, the lens was dislocated. We did not learn the final result of this man's case; he was a German and could not be persuaded to stay.

Dr. Parker: There is one point we wanted to ask on for information. We have often wondered if the specified gravity of the vitreous was greater than that of the lens, and if so, was not that the reason for the lens floating out?

Dr. Tyree: We think the lens being between the vitreous and aqueous humors, the specific gravity is in this order: the vitreous, lens, and aqueous, because of the tendency for osmosis. If the specific gravities were the same, they would mix. Speaking of dislocated lens; we were asked to operate on a case where the old lady had a lens dislocated in the vitreous and other injuries, a broken arm and nose, in a railway accident. Dr. Perkins was very anxious to restore that lens in order to be able to settle with her as cheaply as possible. We took the stand that the risk was greater and advised a settlement on that basis rather than run the risk of having a worse basis.

Dr. Fryer: In regard to Dr. Parker's question. The lens is much the heaviest of all the humors. If you take it by the index of refraction it is much denser. In animals eyes, however, the vitreous is very thick.

Dr. Punton: Is cataract on the increase?

Dr. Tyree: In some localities it is. In people who work in the sun or who perspire very freely the water is abstracted much faster, and, they say these people are much more liable to have it. Age does seem to produce it. You rarely see a cataract under 40, unless it is diabetic or traumatic. Whether there is more cataract in hot countries or not we do not know. There is a very different per cent of cataracts

operated on at different climes. We think Wecker has 16 per cent.

Dr. Fryer: Regarding this matter of healing; the cornea, while it has no bloodvessels, is very largely supplied with lymphvessels. There are immense numbers of leucocytes floating in these spaces. Cohnheim and Stricker made their experiments in regard to inflammation largely in this membrane.

Adjourned.

#### MEETING OF NOV. 1, 1890.

Dr. Geo. W. Davis read a paper on *Enuresis*, published in this issue.

Dr. J. D. Griffith, in discussing the paper, said he had met with some cases of enuresis that were very difficult to cure.

Had a case on hand now of a boy ten years old who has every appearance of perfect health, parents healthy with no neurotic tendency.

This case had resisted all treatment. The bladder being supplied by the anterior branches of the 3rd and 4th and posterior branches of the 2, 3 and 4 sacral nerves; he had tried faradization of these nerves per rectum, by the application of the poles over the region where these nerves make their exit, but with no result.

There was some phimosis but the enuresis was as bad after circumcision as before, not only occurring at night but was produced by any excitement. His bowels were regular, was not addicted to self abuse, had used belladonna till he could not see, had given alkalies, bromides, iodides, lithates, strychnine, and antipyrine. The latter came nearest controlling it, though he knew not why. Thought that had he been allowed to continue the drug he would have been successful but the parents finding out what he was taking stopped giving it to him for fear it was poisonous.

Dr. Beattie had a case that had run the professional gauntlet and upon which he tried almost every thing and only succeeded after regulating her stomach and bowels, giving her a combination of nux vomica, pepsin and colocynth. Another case in which belladonna and alkalies had no effect he relieved by tonic treatment of

Fowlers solution, tr. iodine and syr. ferri pyrophos and having them waken him about midnight.

Dr. Burnett thought the etiology of this trouble might be looked into a little more. At birth the motor and sensory tracts differ greatly in their development. In the child at term the crossed pyramidal tracts and the columns of Turck are scarcely developed but the sensory tracts are well developed. Hence the sensory system is developed but the motor is not.

As the child has not the instinct to control itself it soon becomes a habit of the centers, favored by the unequal development of the two tracts to respond to slight sensations to urinate. Also as circulation is governed some by gravitation, the child that sleeps on its back will have blood gravitate to the parts congesting the nerves that supply the vertebral fibres and as they have more sensory than motor sensation the consequence will be enuresis.

As the faradic current is an irritant, he thinks interrupted galvanic current much better. The anodi over the lumbar and the cathode over the pubic region. When he spoke of habit he meant physiological habit, a habit of the organs themselves. There is a suspension of all motor impulses to a much greater degree than suspension of the preception of sensory impressions, hence the desire to urinate being controlled by a direct act of the will which is absent during the child's sleep, the act is allowed to be accomplished.

Dr. Merriman said that he had had considerable experience with cases of this kind at the "Orphans Home." He had never had any success with drugs and he had used all that had been mentioned.

Children as a rule are very active, taking a great deal of exercise and drink considerable water and when night comes are tired and hungry, after eating a hearty supper, they drop off into a sound sleep during which they evacuate the bladder. He had found that by giving them a light supper, making them urinate before retiring and by using moral persuasion the trouble could be controlled as a rule. He much

preferred the galvanic current instead of the faradic.

Dr. Zwart said that during the summer he treated a girl for fever that had been troubled with enuresis for some time. He had given her 5-grain doses of phenacetine. Some time after her mother asked him for some more of the powders, stating that so long as she was taking the powders she had no trouble with her water. Acting upon the suggestions in this case, he had used it in another case with good results. Both cases have been cured. Thinks enuresis is frequently due to congestion of the medulla oblongata, and that in these cases by regulating the diet and using some depressant they can be cured. Had used rhus aromatica in five cases, but not with the result he could have wished. Three were cured. Had not heard from the others; thought probably they became dissatisfied.

Dr. John Wilson asked Dr. Griffith if any expulsion force existed in his case.

Dr. Griffith—"Yes, sir; very marked."

Dr. Wilson—"Then there is no paralysis." He thought that if antipyrine had been continued the result would have been good.

Dr. Kyger reported a case of a young lady aet. 15 who had had enuresis all her life, not being able to get any relief. He gave her  $\frac{1}{10}$  gr. granules of santonine, which completely cured her. Had used santonine frequently with good results. Thinks the cause is frequently some reflex disturbance from the stomach and bowels. Thought some cases were due to congestion of the spinal cord, due to position, etc.

Dr. Punton thought by paying attention to their diet at night, regulating the quantity of water they drank, and having them void their urine at a certain time during the night, that most cases could be controlled.

Dr. Wainright thought the cause was sometimes due to a hypersensitive condition of the circular fibres around the neck of the bladder.

Dr. Hal Foster said that in the five years that he was connected with the Orphans' Home he had had considerable experience with this trouble, as they had from fifty to seventy-five

children continually on hand, many of whom had had enuresis. He adopted Vogel's system of treatment, which consisted of eating a light dinner about 5 o'clock, with very little fluid. He also used galvanism, belladonna, strychnia, and small doses of calomel and santonine. He never had much trouble in controlling it.

Dr. Davis said that some of the best experimenters divided incontinence into three classes—that which occurred at night, that which occurred in the daytime, and that which occurred during both day and night. To the latter class Dr. Griffith's case belonged, and in these cases belladonna will do no good. Thought nux vomica and ergot would do good. He preferred nux vomica to strychnia in children. Of course no physician would allow a child to gorge itself or drink a quantity of fluid before retiring, as both were exciting causes, though in private practice it is sometimes difficult to restrict the diet because of the poor control some parents have over their children.

Diseases of the genito-urinary organs are divided into those affecting sensation, motion, and secretion. The incontinence under consideration is a motor neurosis, and the result achieved by Ultzmann with electricity went to show that it was due to some of the other causes mentioned in the discussion. In such cases electricity was the best method of treatment. He was not advocating electricity as formerly used, as it was not satisfactory. Though sometimes producing a cure, it often produces worse trouble—cystitis or urethritis.

The benefits derived from belladonna are due to the fact that it diminishes the sensation of the mucous membrane of the bladder and cause partial paralysis of the depressor urinæ. It acts similarly in old men who have some little trouble in passing their urine.

Nitrate of silver, in the strength of ten grains to the ounce, has been used in the deep urethra of young women with some good results, but would not recommend it in children. Whatever the form of treatment adopted, it should be persistent.

Adjourned.

## SELECTIONS.

## RECENT RESEARCHES ON DIPHTHERIA AT THE PASTEUR INSTITUTE.

Although MM. Roux and Yersin's contributions to our knowledge of the nature and causation of diphtheria have been more than once referred to in the *British Medical Journal*, their results are so important that a complete account of them will no doubt be welcome to very many readers. The papers, of which an abstract is here given, appeared in the *Annales de l'Institut Pasteur*, in December, 1888; June, 1889; and July, 1890, respectively.

In the first memoirs the authors give a summary of Klebs', Loeffler's, and Hoffmann's work, and describe Loeffler's method for the separation of the organisms as follows: With a platinum needle beaten out at the end to form a kind of spatula, a piece of false membrane from a case of diphtheria is taken, and stroke cultivations are made on the surface of solidified blood serum; then, without recharging the needle, stroke cultivations are made in several other similar tubes. These are incubated at from 33° C., to 35° C., when a number of growths soon make their appearance along the lines of the strokes, very numerous in the tubes first inoculated, but less numerous in the later ones, in which the colonies are somewhat separated from one another. Some of the colonies, by their more rapid growth (they are visible at the end of twenty hours, and have a characteristic appearance after forty-eight hours), may be recognized as the specific diphtheria bacillus. These grow as small, rounded, grayish-white points, the center of each of which is more opaque than the periphery. They spread rapidly on the serum, form greyish, rounded, projecting plates, and then develop so rapidly that they are very evident before the other organisms have begun to form a colony. They also grow on gelose, but somewhat more slowly, as the colonies are not so well developed. From the rapidly growing points pure cultivations are easily made. The bacillus so separated and stained with Loeffler's methylene blue is not quite so long as the tubercle bacillus, but is slightly thicker, the extremities are more deeply stained than the middle portion. In older cultivations the rods are not uniformly colored, and there may be seen, in the interior, bodies which somewhat resemble spores. The bacillus is motionless, grows rapidly in meat fluids with an alkaline reaction, rendering them slightly acid; they,

however, become alkaline again if there is free access of air. The acid reaction is always most marked when glycerine is added to the cultivation medium. The bacilli grow *in vacuo*, but more slowly than in air; they are killed by the acid, but if the fluid is kept alkaline by the exclusion of air they retain their vitality for a period of six months, or even longer. The bacilli in older cultivations are always more difficult to stain than in those of more recent date.

Pure cultivations of this bacillus inoculated on the excoriated mucous membranes of rabbits, guinea-pigs, or pigeons, give rise to characteristic false membranes. Injected under the skin, they cause edema at the point of inoculation, and death of the animal takes place. On a *post-mortem* examination it is found that there is general increased vascularity and congestion of the vessels of the intestines and kidneys. In the guinea-pig there is also found congestion of the suprarenal capsule and serous effusion into the pleural cavities. In the rabbit there is no pleural effusion, but the liver undergoes fatty degeneration; if death does not take place too rapidly, diphtheritic paralysis is usually present. The bacillus in such cases is found only at the point of inoculation, it does not appear to grow in the organs, and it often disappears, even from the point of inoculation during the later stages of the disease. From this fact it is concluded that diphtheria is an intoxication caused by an extremely active poison, which is formed by a microbe in and near the point of inoculation.

Additional proof of this is found in the fact that in pure cultures of the diphtheria bacillus there exists a special chemical substance, which, when freed from bacilli by means of Chamberland's porcelain filter, and injected under the skin of animals, gives rise to nearly all the symptoms and lesions of the disease that follow the inoculation of the bacillus itself; the false membrane only not making its appearance. Animals into which a smaller dose is injected are frequently attacked by a typical diphtheritic paralysis. MM. Roux and Yersin contend that, by their experiments, they have proved beyond doubt that Klebs and Loeffler have described a specific bacillus of diphtheria which gives rise to a typical poison, and that this administered in small quantities, is capable of reproducing characteristic diphtheria paralysis.

In the second paper the authors describe some of the properties of the diphtheritic poison. They point out that as soon as the cultivation becomes acid the toxic power is very consider-

ably diminished, but that as soon as it becomes alkaline again the virulence is greatly increased, one-fifth of a cubic centimetre of the poison filtered from a cultivation growing for 42 days killing a guinea-pig in thirty hours. They find that when the poison is injected into the veins of dogs in doses of 20, 10, or 4 cubic centimetres, the animal succumbs in from fourteen to twenty-six hours; when in doses of 2 cubic centimetres, the dog remains alive for from four to six days. In acute cases there is general increased vascularity of the organs, desquamation of the cells from the mucous surfaces, the urine contains albumen, and the blood is black and fluid. When the disease takes a slower course the mucous membrane is usually yellow, the vessels are greatly distended, there are minute petechial hemorrhages, the urine is albuminous, desquamative changes occur in the tubules of the kidney, and an increase of young connective tissue corpuscles and leucocytes is found in the interlobular spaces of the liver. A less dose than 1 cubic centimetre of the filtered liquid injected into a dog of from 7 to 10 kilos weight causes a temporary paralysis very similar to that met with in the human subject. Wherever a rabbit becomes paralyzed death ensues, but both the pigeon and the dog, especially the latter, may recover. They mention that Nocard points out that sheep as well as dogs are susceptible to the action of the diphtheritic poison, 5 cubic centimetres of the filtered liquid causing death in three days. Rats and mice resist the action of the poison.

The authors consider that the poison has certain characteristic resemblances to the diastases; thus, when heated in sealed tubes over a water bath to 58° for a couple of hours, the toxic activity is diminished at least seven-eighths, that is eight times the dose does not produce the same effect, although some edema is still produced at the point of injection, whilst very large quantities of a poison that has been heated to 100° C., introduced into the veins of a rabbit and under the skin, do not produce any immediate effect, although sooner or later the animal becomes feeble, does not take its food well, and shows symptoms of paralysis several days before its death. They consider that the poison left after each heating is similar to that which can be separated from the spleen, other tissues, or urine of diphtheritic patients, which produces distinct but not characteristic diphtheritic toxic effects on guinea-pigs and rabbits. They argue from this that heating destroys a great part of the poison, and that the action of the animal tissues on the poison brings about a similar re-

sult, that is, it produces a poison which acts much more slowly than, and somewhat differently to, the true diphtheritic poison. Like diastase, the diphtheritic poison is rapidly modified by sun light in contact with air, but if air is excluded the diminution in toxicity brought about by light is comparatively slight.

Acid added to the virulent alkaline filtered liquid has a very marked effect in diminishing the activity of the poison, but this effect is almost immediately lost on the addition of an alkali, in order to again neutralize the fluid.

When the filtered liquid is evaporated *in vacuo* over sulphuric acid, at a temperature of 25° C., a residue is left which is soluble in water and has most marked toxic properties. The poisonous material is insoluble in alcohol, and it may even be precipitated from a watery solution, in greyish-white flakes, by the addition of strong alcohol. The poison passes slowly through a dialysing membrane—a fact by means of which may be explained the slower onset of the symptoms when diphtheritic material is introduced under the skin than when it is injected into the blood. The addition of chloride of lime to the filtered cultivation liquid causes a precipitation of the poison, phosphate of lime appearing to hold the poison more tenaciously than any other substance; with chloride of aluminium there is a gelatinous precipitate which also contains a certain proportion of the toxic material. The filtered fluid treated with these substances loses its toxicity, whilst the precipitate formed inoculated into the animal kills most surely, though always somewhat slowly. Here, then, is another point of resemblance between the diastases and the diphtheritic poison.

The authors calculate that 1 cubic centimetre of the active liquid evaporated *in vacuo* leaves 1 centigramme of dried residue. Deducting from this the weight of the ash and the portion insoluble in alcohol, which has no toxic action, there remains four-tenths of a milligramme of organic material of which only a small proportion can be diphtheritic poison. Even as minute a dose as this, however, is sufficient to kill eight guinea-pigs, two rabbits, or one medium-sized dog; if the latter does not succumb, he remains ill for a very considerable period. The poison may be ingested in very much larger quantities without giving rise to any serious effects. It is most virulent when inserted under the skin or injected into a vein. They conclude that the poison has many analogies with the diastases, and that its activity is comparable to that met with in these substances, or to that of snake-bite poison; not that it brings about the

phenomena of hydration, or that it inverts sugar, or digests fibrine, but only that it is like the diastases in the points already mentioned. They think that the poison acts especially on the walls of the blood vessels, in evidence of which they point to the vascular dilations met with, to the pescehial hemorrhages, and to the edematous patches that are found after death. The activity of the diphtheritic poison, they say, must not be confounded with what is called the virulence of the bacillus, and they state that if  $\frac{1}{2}$  cubic centimetre, of an old cultivation of the diphtheria bacillus be injected under the skin of a guinea-pig, that although the animal dies from toxic poisoning, this is in nowise due to the virulence of the bacillus, which when taken from old cultivations is quite unable to multiply in the subcutaneous tissue, but to the activity of the poison that has been already formed in the culture, and they insist that the term "virulence" should be restricted in its meaning to the power of a microbe to develop in the body of a living animal, a power which may be considerably increased by passage of the micro-organism through a series of animals, the bacillus in each host acquiring a more and more parasitic habit. They state also that an extremely toxic fluid can be obtained from microbes which have been deprived of all their virulence.<sup>1</sup> They conclude that it is difficult, on account of the extreme activity of the poison, to habituate the tissues of an animal to its action, as even very minute doses produce marked poisonous effects, and they insist most strongly that because of this energetic toxic action diphtheria should be attacked as early as possible; that if one allows the bacillus time to form a sufficient dose of poison, it is useless to remove the diphtheritic membrane, as though the bacilli may be then destroyed, sufficient poison has passed into the system to cause the death of the patient; "for in diphtheria, contrary to what occurs in other infective maladies, the infection is not produced by the invasion of the tissues by a microbe, but by the diffusion through the organism of a toxic substance prepared on the surface of a mucous membrane altogether outside the body, so to speak."

In their third memoir, MM. Roux and Yersin discuss the importance of finding the bacillus by microscopic examination and by Loeffler's blood serum cultivations (mentioned in the first memoir) in order to arrive at an accurate diagnosis, and they consider that even practicing

physicians should be able to carry out these methods in those cases where there is any difficulty in making a diagnosis. They themselves have made or verified such diagnoses by the method in more than a hundred cases of diphtheria, and they think that by these alone will accurate and thoroughly scientific results be obtained.

In order to stain the bacillus, it is merely necessary to remove a small fragment of the false membrane by means of a piece of absorbent cotton-wool tied firmly to a pair of forceps or to a penholder, from which it is transferred to a scrap of blotting-paper, and thence to a cover glass, where it is broken down as finely as possible, heated over a flame in the ordinary fashion, and stained with Loeffler's methyl blue or with gentian violet by Gram's method (washing thoroughly with water before attempting to examine), or by a special method introduced by the authors, in which they use a blue composed of equal parts of aqueous solution of violet dahlia and methyl green, with water added until a clear, but not too deep, blue is obtained. This fluid keeps perfectly clear for a considerable time, and does not throw down any precipitate. A drop of this is placed on the slide, the cover glass on which the fragments are dried is inverted and lowered on to it, the superfluous fluid is removed with a piece of blotting-paper, and the organism is examined at once.

The diphtheria bacillus appears to be stained more rapidly and more deeply than any of the indifferent organisms, amongst which they can be seen grouped in small masses as short straight or curved rods with slightly thinned or rounded ends. In some instances they may be slightly club, or pear-shaped; they may be granular and unequally stained. In true diphtheria these bacilli are never absent, and with a little practice it is easy to distinguish them from all other forms. In some cases the membrane consists of an almost pure cultivation of the typical bacilli. The organisms with which they are usually associated are various forms of cocci, streptococci, and delicate or thicker bacilli. Some of the organisms (though these are not numerous) cause rapid liquefaction of the consolidated serum on which the cultivations are made. As the false membrane becomes fetid the indifferent organisms become more numerous, especially on the surface, the specific organisms being entangled in the deeper fibrinous net-work. This examination may be completed in a few minutes. It gives the most precise information, and may be practiced on false membranes sent wrapped in linen or blot-

1. This statement does not appear to be consistent with the position the author subsequently takes on the question of the identity of species of the true diphtheria bacillus and pseudo-diphtheria bacillus.

ting-paper from a distance, even when the membrane is dried. Even the course and prognosis of the disease may be followed and indicated by the daily use of the microscope. Where improvement is taking place the specific bacilli becomes less numerous, whilst the other microbes become increased in number. Sometimes, even at the beginning of a case of diphtheria, it is possible to predict a favorable issue from the presence of a small number only of the specific bacilli and a large number of other microbes. The authors go so far as to say that some of the organisms met with under these conditions interfere with the growth and activity of the specific bacillus.

In order to be absolutely certain of the diagnosis they recommend that the physician should make cultivations on blood serum as described in the first memoir. Such cultures should be made only with the material taken from the false membrane, and great care should be taken that none of the buccal mucus is taken. Here also the membrane will yield results, even when it is dried, as the bacilli, in this condition, retain their vitality for a considerable time and can withstand a temperature of  $98^{\circ}$  C. for a whole hour—a temperature which many of the ordinary organisms cannot withstand for even a shorter time. They consider that this method should be used to make absolutely certain in all doubtful cases, and the success they have had in diagnosing diphtheritic throat from other forms of angina and croup justifies their contention. They point out the organisms accompanying the diphtheria bacillus, or occurring alone, differ in different cases, and they refer the streptococcus described by Prudden to the scarlatinal forms of throat mischief. They further maintain that all doubtful cases of diphtheria should be kept in an observation ward until the diagnosis has been confirmed by one or both of the above methods. As regards the time at which the bacillus may be found, they state that it may be present in small numbers in the throat, even before the false membrane makes its appearance, and that it persists in the mouth after the membrane has disappeared for periods observed in four cases of three, three, eleven and fourteen days; and they throw out the practical hint that convalescent diphtheritic patients should not be allowed to associate with their schoolfellows, playmates, or families, for even a longer period than a fortnight after the membrane has disappeared, and that not only should all clothes, bed linen, etc., be disinfected, but that the throat should be carefully washed, swabbed, or gargled several times a day with disinfecting lotions.

In addition to the facts pointed out in the first paper as regards the preservation of the diphtheritic virus outside the body, they find that, at the temperature of the room, the organisms retain their vitality for at least six months, for five months at  $33^{\circ}$  C., for two months at  $39^{\circ}$  C. When deprived of air and protected from the light they remain alive for about thirteen months. Of course they are killed by a moist temperature of  $58^{\circ}$  C. If the bacilli are removed from the medium on which they are growing and are dried they lose their vitality sooner, those kept at  $33^{\circ}$  C. being killed in three months, those kept at the temperature of the room in four months, and at a temperature of  $45^{\circ}$  C. they were incapable of developing after four days. If the false membrane, with the bacilli after removal, is wrapped in linen or paper and kept away from the light, cultivations may be made for five months after desiccation, but under the action of light and alternating moisture and dryness the virus is destroyed much more rapidly. A moist temperature of  $58^{\circ}$  is sufficient to kill the organism, so that boiling water is always perfectly efficacious in destroying its vitality, although it requires a dry heat of  $98^{\circ}$  C. to be continued for an hour to bring about the same result.

The next part of the paper is devoted to showing that the virulence of the bacillus undergoes marked modification during the course of an attack of diphtheria, and that the condition of the patient is modified, not only by the alterations in the numbers of the bacilli, but also by their virulence at different stages. As the disease advances the number of virulent bacilli increases rapidly, whilst as the case approaches cure the bacilli that can be separated do not produce such marked symptoms when inoculated into animals, first the constitutional and then the local symptoms being gradually modified.

The authors believe, indeed, that the virulent and non-virulent bacilli represent a difference in degree and not one of kind, and that the pseudo-diphtheritic bacillus first described by Loeffler and then by Hoffman, may after all be only a kind of saprophytic form of the parasitic bacillus. As regards the attenuation of the diphtheritic virus, they maintain that it is an exceedingly difficult matter to obtain a true attenuated virus, that is, a form from which the attenuated properties will be handed down to successive generations, as in the case of a modified anthrax virus. After many futile efforts they found that when currents of air at a temperature of  $39.5^{\circ}$  C. were passed through the broth

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DOSE.—One pill, two or three times a day, at meals.

THERAPEUTICS.—When deemed expedient to prescribe phosphorus alone, these pills will constitute a convenient and safe method of administering it.

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R Phosphori, 1-100 gr.; Ferri Carb., 1 gr.; Ext. Nucis Vomicae,  $\frac{1}{4}$  gr.

DOSE.—One or two pills may be taken two or three times a day, at meals.

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THERAPEUTICS.—PHOSPHORUS increases the tonic action of the iron and quinine, in addition to its specific action on the nervous system. In general debility, cerebral anæmia, and spinal irritation, this combination is especially indicated.

## Pil: Phosphori cum Ferro et Quinia et Nuc. Vom. (W. R. Warner & Co.)

R Phosph., 1-100 gr.; Ferri Carb., 1 gr.; Ext. Nuc. Vom.,  $\frac{1}{4}$  gr.; Qui. Sulph., 1 gr.

DOSE.—One pill, to be taken three times a day, at meals.

THERAPEUTICS.—The therapeutic action of this combination of tonics, augmented by the specific effect of Phosphorus, on the nervous system, may readily be appreciated.



FROM THE VENTRICULUS CALLOSUS GALLINACEUS.

A powder: prescribed in the same manner, doses and combinations as Pepsin, with superior advantages in INDIGESTION, CHOLERA INFANTUM, MARASMUS and STOMACH TROUBLE, in which Pepsin is usually given.

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—IN DOSES OF 10 TO 20 GRAINS.—

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EFFERVESCENT  
SEDATIVE ANODYNE

**BROMO**  
(WARNER & CO.)  
**SODA**

**R** Bromide Soda, grs. xxx.  
Caffein, - - gr. i.  
In each heaping teaspoonful.

## THERAPEUTICS.

### USEFUL IN

Nervous Headache, Sleeplessness, Excessive Study, Migraine, Nervous Debility, Mania, and as a remedy in Sea Sickness and Epilepsy.

## DOSE.

A heaping teaspoonful in half a glass of water, to be repeated once after an interval of thirty minutes if necessary.

It is claimed by prominent specialists in nervous diseases, that the Bromide Sodium is more acceptable to the stomach than the Bromide Potassium. An almost certain relief is obtained by the administration of this Effervescent Salt. It is used with advantage in indigestion, the depression following alcoholic and other excesses, as well as Nervous Headaches. It affords speedy relief in Mental and Physical Exhaustion.

EFFERVESCENT  
SEDATIVE ANODYNE

**BROMO**  
(WARNER & CO.)  
**POTASH**

**R** Bromide Potash, grs. xx.  
Caffein, - - gr. i.  
In each heaping teaspoonful.

## THERAPEUTICS.

### USEFUL IN

Sleeplessness, Over Exercise of the Brain, Intense Study, Nervous Debility, etc., and in all cases for which the above remedies are given singly to advantage.

## DOSE.

A heaping teaspoonful in half a glass of water, to be repeated once after an interval of thirty minutes, if necessary.

An almost certain relief is afforded by the administration of this Effervescent Salt. It produces a pleasant and delightful draught, by mixing a large teaspoonful with part of a glass of water and drinking while effervescing. It is used with advantage in indigestion, depression following alcoholic and morphia excesses, and nervous headache. It will afford speedy relief for mental and physical exhaustion. The therapeutic value and great advantage of this preparation will be readily recognized by the profession.

✶ We have adopted the above shortened title for our Hydrobromate of Caffeine and Bromide of Potassium.



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### Parvules of Calomel, 1-20.

Med. Prop.—Alterative, Purgative.

DOSE.—1 to 2 every hour. Two Parvules of calomel, taken every hour, until five or six doses are administered (which will comprise but half a grain), produce an activity of the liver which will be followed by bilious dejections and beneficial effects, that twenty grains of Blue Mass or ten grains of Calomel rarely cause, and sickness of the stomach does not usually follow.

### Parvules of Calomel and Ipecac.

R. Calomel, 1-10 gr. Ipecac, 1-10 gr.

Med. Prop.—Alterative, Purgative.

DOSE.—1 to 2 every hour. Two Parvules of Calomel and Ipecac, taken every hour until five or six doses are administered (which will comprise but a grain of Calomel), produce an activity of the liver, which will be followed by bilious dejections and beneficial effects, that twenty grains of Blue Mass or ten grains of Calomel rarely cause, sickness of the stomach does not usually follow.

### Parvules of Aloin, 1-10.

Med. Prop.—A most desirable Cathartic.

The most useful application of this Parvule is in periodic irregularities—Dysmenorrhœa and Amenorrhœa. They should be given in doses of one or two every evening at and about the expected time.

DOSE.—4 to 6 at once. This number of Parvules, taken at any time, will be found to exert an easy, prompt, and ample Cathartic effect, unattended with nausea, and in all respects furnishing the most aperient and cathartic preparation in use. For habitual constipation, they replace when taken in single parvules, the various medicated waters, avoiding the quantity required by the latter as a dose, which fills the stomach and deranges the digestive organs.

### Parvules of Podophyllin, 1-40.

Med. Prop.—Cathartic, Cholagogue.

Two Parvules of Podophyllin, administered three times a day will re-establish and regulate the peristaltic action and relieve habitual constipation, add tone to the liver, and invigorate the digestive functions.

### Parvules of Arsenit: Potash, 1-100.

(WARNER & CO.)

This Parvule will be of great use to physicians, as two Parvules represent the equivalent of one drop of Fowler's Solution, so that physicians can regulate the dose by giving one or more Parvules every hour.

### Parvules of Corrosive Sublimate. 1-100.

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Dr. Ringer, in his treatise, lays great stress upon the efficacy of minimum doses of corrosive sublimate in the treatment of Diarrhœa, whether the stools contain blood or not.

### Parvules of Nux Vomica, 1-50.

(WARNER & CO.)

Nux Vomica, according to Ringer, is possessed of real curative powers for sick headache, accompanied with acute gastric catarrh, whether due to error in diet, constipation, or no apparent cause. He regards it, administered in small and frequently repeated doses, as useful in many disturbances of the gastric functions.

# LIQUID PANCREOPEPSINE.

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## A REMEDY FOR INDIGESTION.

Containing Pancreatine, Pepsin, Lactic and Muriatic Acids, etc. The Combined Principles of Indigestion. To aid in Digesting Animal and Vegetable Cooked Food, Fatty and Amylaceous Substances.

Dose.—3 iv, containing 5 grs. Pepsin, after each meal, with an Aperient Pill taken occasionally.

This preparation contains in an agreeable form the natural and assimilative principles of the digestive fluid of the stomach, comprising Pancreatine, Pepsin, Lactic and Muriatic Acids. The best means of re-establishing digestion in enfeebled stomachs, where the power to assimilate and digest food is impaired, is to administer principles capable of communicating the elements necessary to convert food into nutriment.

The value of Liquor Pancreopepsine in this connection has been fully established, and we can recommend it with confidence to the profession as superior to pepsin alone. It aids in digesting animal and vegetable cooked food, fatty and amylaceous substances, and may be employed in all cases where from prolonged sickness or other causes, the alimentary processes are not in their normal condition.

# ELIXIR SALICYLIC ACID COMP.

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## A Potent and Reliable Remedy in Rheumatism, Gout, Lumbago and kindred diseases.

This preparation combines in a pleasant and agreeable form :—Salicylic Acid, Cimicifugæ, Gelsemium, Sodii Bi-Carb, and Potass, Iodid., so combined as to be more prompt and effective in the treatment of this class of diseases than either of the ingredients when administered alone.

This remedy can be given without producing any of the unpleasant results which so often follow the giving of Salicylic Acid and Salicylate of Sodium, viz. : gastric and intestinal irritation, nausea, delirium, deafness, nervous irritability, restlessness, and rapid respiration ; on the contrary, it gives prompt relief from pain, and quiets the nerves without the aid of opiates.

Elixir Salicylic Acid Comp. has been extensively used in private practice for several years with almost unvarying success and with better results than any other mode of treatment yet suggested.

It is a matter of great satisfaction to us to be able to place before the medical profession a remedy so effectual in the cure of one of the most stubborn classes of disease.

The dose is from a teaspoonful to a dessertspoonful, and increased as necessary to meet the requirements of the case.

Each teaspoonful contains five grains of Salicylic Acid.

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## ALTERATIVE, RESOLVENT, APERIENT TONIC.

COMPOSITION :—Phytolacca Decandra, Stylingia Sylvatica, Lappa Major, Corydalis Formosa, aa grs. vi., Xanthoxylum Fraxineum, Potassii Iodidum, Cascara Sagrada, aa grs. ij., in each dessertspoonful.

Syr. Phytolacca Comp., the Composition of which has been given to the profession, has been known and used by Physicians, myself and others of my acquaintance, and found superior to other alterative compounds now in use. It has been used with great success in the treatment of Lupus, Herpes, Psoriasis, Acne, Glandular Enlargements, Strumous Affections, Granular Conjunctivitis, and Eczema. As a remedy for Syphilitic Diseases of the Skin and Mucous Membranes, it has proved to be especially valuable in my hands in a large number of cases where all the usual remedies had failed to improve their condition, and when Syr. Phytolacca Comp. was administered the improvement was very prompt and satisfactory.

It will be seen that Syr. Phytolacca Comp. contains the best alterative remedies now in use, and that they are so combined as to make a permanent and agreeable preparation that can be administered to children or persons with the most delicate stomach.

I usually prescribe it in doses of a teaspoonful, which may be increased to a tablespoonful four times a day, the frequency of the dose to be diminished if bowels become too active.

CHARLES W. BROWN, M.D.

# ELIXIR CASCARA SAGRADA.

(WM. R. WARNER & CO.)

Used as a Remedy in Habitual Constipation, and as a Tonic in Stomachic Debility.

Med. Prop.—Mildly Laxative, Anti-Rheumatic.

Dose—3i to 3ij.

Each fluid oz. contains 60 grs. Cascara Sagrada.

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in which the organisms were growing the bacilli lost their virulence, and in the end died. But they also found that dried membrane kept for a considerable time, as already mentioned, gave colonies having a typical appearance, but when the bacilli from these were inoculated into animals it was found that they had lost their virulence. These experiments, however, were only partially successful, as it was found impossible to graduate the attenuation; and although the virulent bacillus only could elaborate the toxic material, and then only under favorable conditions; and as the virulence became modified or the conditions altered the activity of the toxine was also modified, and these factors could not be fully controlled.

As regards the return of virulence to the attenuated diphtheritic bacillus, it was found that it usually takes place when it grows on the surface of the fauces along with other organisms, especially along with the streptococci found in erysipelas, and probably along with those of measles, scarlet fever, and similar diseases—the well known relation of diphtheria to these diseases bearing out this statement.

As the practical outcome of the researches they state that: "The best method of arresting the spread of diphtheria is to recognize the disease as early as possible; consequently a precise diagnosis should be made by microscopic examination of the false membranes, and this should be confirmed by cultivations on blood serum," as the former takes only a few minutes, and as the latter gives results in twenty-four hours, both these methods are available in private practice or where patients can be sent to an observation ward.

"Active diphtheritic virus can remain in the mouth for a long time after the malady is cured. Consequently diphtheritic patients should only be allowed to resume their ordinary course of life when they are no longer bearers of the bacillus.

"Diphtheritic virus retains its virulence for a long time when kept in a dried state. It is therefore necessary to disinfect in a steam sterilizing apparatus the linen and all articles that have been in contact with diphtheritic patients.

"The attenuated virus of diphtheria is widely distributed, and it readily regains its virulence. It is therefore necessary at the very commencement of simple forms of throat disease, and of those associated with measles and scarlatina, to practice careful and frequent swabbing of the throat with antiseptics."

In the course of their papers MM. Roux and Yersin refer to the following literature:

Klebs' *Beiträge zur Kenntniss der pathogenen Schizomyceten*; *Archiv f. exp. Path. u. Pharm.*, Bd. iv. 1875; Talamon, *Progrès Médical* 1881, p. 112 et 498; Klebs' *Verhandlungen des Gonrecesses für innere Medizin*, ii, Abtheilung, Weissenbaden, 1883, S 143; Loeffler, *Mittheilungen aus den kaiserl. Gesundheitsamte*, Bd. ii, 1884, S. 421; also *Centralbl. f. Bakt.*, Bd. ii, S. 105, 1887; G. von Hoffmann, *Wiener med. Wochenschrift*, 3 u. 4, 1888; Dr. Bard, *Lyon Médical*, 1889; Gamaleia, *Annales de l'Institut Pasteur*, 1889, p. 609. They also mention that Zarniko, *Centralbl. f. Bact. u. Parasitenk.*, 1889, Sponk, Kolisko and Paltauf, in the same *Journal* May 24th, 1889, have found the specific bacillus in the cases of diphtheria that they have examined, and have demonstrated the formation of a special poison in their cultures. Prudden and Northrop† were not able to find the Klebs-Loeffler bacillus in certain cases of diphtheria, but they were always able to isolate a streptococcus from the false membranes, to which organism they attribute a specific rôle. Max Beck‡ has carried on infection experiments upon guinea-pigs placed in a box infected by the diphtheria bacillus. He has also demonstrated the lesions of bacteria. Loeffler§ and Babes|| state that young rabbits are very susceptible to diphtheria virus, and Babes also believes that the streptococcus, which almost invariably accompanies the diphtheria bacillus, plays a part in the production of the false membranes.

Klein¶ has been successful in isolating from false membranes two bacilli similar to the Klebs-Loeffler bacillus. One of these grows slowly upon gelatine, the other profusely at the ordinary temperature of the room. The latter of these he regards as the diphtheria bacillus. He considers that cats are very susceptible to diphtheria, and that they can communicate it from one to the other, and that cows are also, to a certain degree, susceptible to inoculation with this disease. The bacilli then appear on the udders in small pustules. Milk from such cows he thinks may readily become the agent of the spread of the disease.

Escherich(a) points out the susceptibility of young dogs to the diphtheria poison, and insists on the diagnosis of the disease by means of serum cultivations. He observes that the specific bacillus can exist in the mouth three days after the disappearance of the false mem-

† *Amer. Journ. of Med. Sci.* June, 1889.

‡ *Zeitschr. f. Hygiene*, Bd. viii, Heft 3, 1890.

§ *Deutsch. med. Wochenschr.*, 5 and 6, 1890.

|| *Virchow's Archiv*, Bd. cxix, Heft 3, 1890.

¶ *Centralbl. f. Bact. u. Parasitenk.*, Bd. vii, No. 25, 1890.

(a) *Ibid.*, January 1890.

branes. Grancher,(b) Sevestre,(c) Chantemesse and Vidal,(d) and Brieger and Fraenkel(e) have demonstrated the principal properties of diphtheritic poison. They endeavored to obtain it in a pure state, and they think that it is a substance of an albuminoid nature—an albumose according to Hankin.—*British Medical Journal*.

### KRAUROSIS VULVE.

BY CHARLES N. SMITH, M. D., TOLEDO, OHIO.

Under the name of "Serpiginous Vascular Degeneration," Mr. Lawson Tait,<sup>1</sup> in 1877, described a diseased condition of the nympe, which was essentially a progressive atrophy of these parts, attended with the appearance of exquisitely sensitive areas of brick-red to purplish color upon mucous membrane. These sensitive areas had a tendency to disappear after a time and appear in another situation, or extend in a serpiginous manner. This extension generally continued until the whole inner surface of the labia minora and the vestibule had been traveled over. These spots were so sensitive to pressure that intercourse could not, as a general thing, be tolerated. The disease was one of long duration; little amenable to treatment; recovery generally spontaneous; and resulting in atrophy of the nympe and narrowing of the vaginal opening.

This condition generally occurred, as observed by Mr. Tait, at or after the climacteric, although he reports one case in a girl of seventeen years.

In his recent work Mr. Tait says<sup>2</sup>:

"The nymphes are also subject to a peculiar and atrophic change, which occurs generally at or after the climacteric period. It is a very distressing complaint, and one of the most intractable with which we ever have to deal. It is very often, but by no means always, associated with vascular caruncle of the urethra. . . . This affection has been alluded to by Simpson and various other authors, but no description which I have seen includes all the facts that may be observed in connection with it. It is always confined, in my experience, to the mucous membrane on the inner surface of the nympe, and is never met with on the labia majora or in the vagina higher than the vestibule."

(b) *Bulletin Medical*, 1890.

(c) *Progress Medical* May 3d, 17th, 24th, 1890.

(d) *Semaine Medicale*, May 14th, and *Bulletin Medicale*, June 15th, 1890.

(e) *Berlin, klin. Wochenschr.*, 1890.

1. *Diseases of Women*, 1877, page 43.

2. *Diseases of Women and Abdominal Surgery*, 1889, page 51, et seq.

From other cases, which I shall refer to later in this article, it will be seen that the disease does extend to the labia majora, although not observed there by Mr. Tait.

As to the course and final termination of this disease, Mr. Tait further says<sup>3</sup>:

"It is in fact a progressive atrophy of the mucous membrane, the last textures affected being the blood vessels and nerves; for when the process has been completed, the pain ceases, the redness disappears, and nothing remains but a vestibulum vagina, so narrow that incredulity may be excused when the patient states that she has borne children."

The treatment recommended by Mr. Tait is the application of strong carbolic acid to the red spots, and the insertion between the labia, at bed-time, of a tampon wet with a saturated solution of neutral acetate of lead and glycerine.

Edis<sup>4</sup> describes this disease, but throws no new light upon it. In fact his article is merely a description of the disease as observed by Tait. Matthew D. Mann describes the disease as seen by Tait, and says<sup>5</sup>:

I have never met with any cases of this disease, and am unacquainted with any reference to it in American medical literature.

Skene has undoubtedly met with the disease in its last or atrophic form, as in speaking of pruritus vulva he says<sup>6</sup>:

"In the majority of cases of this kind that have come under my observation, the skin has been bleached, in spots appearing whiter than the normal skin. It has also the normal elasticity. To the touch it seems harder and less flexible, but what these changes are, and whether they are related to the pruritus, are questions that have not been yet answered."

In 1885, Breisky,<sup>7</sup> of Prague, published an account of twelve cases of this peculiar disease which had come under his observation. He gave it the name of "Kraurosis Vulve," or shrinking of the vulva. Most of the cases observed by Breisky were evidently in the last stage of the disease, as he makes no mention of the presence of the red spots except in one case.

In a recent paper,<sup>8</sup> Dr. H. H. Ohmann-Dumesnil reports thirty-five cases which he has collected from various sources, including three

3. *Op. cit.*, page 53.

4. *Diseases of Women*, 1881, page 390, et seq.

5. *American System of Gynecology*, Vol. 1., page 500, et seq.

6. *Diseases of Women*, 1869, page 95, et seq.

7. *Centralblatt für Gynäkologie*, June 6, 1885.

8. *New Orleans Medical and Surgical Journal*, March, 1890.

cases observed by himself. Breisky's cases are included, but no reference is made to those seen by Tait. Robert F. Weir first described a case of this disease in March, 1885.<sup>9</sup> In these thirty-five cases the presence of thickened areas or plaques of various colors, red, gray, milky, pearly or opaline, is mentioned as occurring in nearly all. Atrophy of some part or parts of the vulva was present in all. In some of them the labia majora were affected, which is contrary to the observations of Tait. Pruritus, a condition not mentioned by Tait, was present in fifteen, and ranged in severity from moderate to intense. Of the thirty-five cases, four had suffered from syphilis. Gonorrhea had occurred in two. Leucorrhea, a condition present in all of Tait's cases, is mentioned as being present in eleven cases.

Treatment was generally successful in those cases which were seen in the earlier stages, but was unsuccessful in the atrophic stage. The treatment consisted in curetting the spots, and in the application of liquor ferri sesquichloridi, lotions of salicylic acid, pyrogallie acid and acetic acid.

As to the frequency of the disease, Ohmann-Dumesnil says:

"The fact that there have been but few cases of this character reported, does not argue that it is a rare condition by any means. In fact, I am inclined to the belief that it is rather frequent, and that it is simply owing to inattention that more of a similar character have not been reported. It is only lately that any considerable degree of attention has been drawn to this disease in medical journals, and all the literature given so far has consisted of short abstracts of the articles quoted in this paper, and of Dr. Heitzmann's cases. When the condition becomes better known, the number of cases will, no doubt, multiply, and what is now looked upon as an unusual disease, will be frequently seen and noted."

I now add one more case to those already reported:

"Mrs. A., aged fifty-two, married, and the mother of two children, the younger aged sixteen, consulted me in April, 1888. She was of a marked nervous temperament, slight and delicate figure, but apparently in good health. She had never had syphilis or gonorrhea. Six years before, and four years prior to the cessation of menstruation, she first noticed a pruritus vulva, attended with pain and scalding upon urination. The pruritus gradually increased for about one year, when she consulted a physi-

cian, who found and removed a urethral caruncle. Following the operation there was relief from the pain and scalding upon urination, but no abatement of the pruritus. On consulting a second physician, several months later, she was told that her trouble was undoubtedly the result of diabetes. She was therapeutically and dietetically treated for diabetes for nearly a year, and was given carbolized washes and various ointments for the vulva. The carbolized washes somewhat relieved the pruritus, although it was always present in some degree. This physician made no local examination and never examined the urine for sugar, although he was positive in his diagnosis of diabetes."

I carefully examined several specimens of her urine, obtained at different times, and found no trace of sugar.

On examination of the vulva a most peculiar condition was found. The hairs on the parts were few, harsh and gray. The vulva was slightly gaping. The labia majora was shrunken, inelastic and composed almost entirely of integument, the subcutaneous tissue having nearly disappeared. A little over one-half of the lower or posterior portions of the labia minora were atrophied, while the other portions were natural in size and appearance, except for the purple spots mentioned below. The vaginal opening was so narrowed that only the small, virgin size of Sims' speculum could be inserted. About one-fourth of an inch below the meatus urinarius was an exquisitely sensitive patch of dark purple color, a little over one-fourth of an inch in width, and extending downward and to the right for about one-half of an inch. Another similar spot, but smaller, was found on the inner or vaginal surface of the upper portion of the left labium minus. Small and exceedingly thin membranous tags were all that remained of the hymen. The clitoris was normal. The integument of the lower portion of the labia minora and on the inner surface of the labia majora was dry, smooth, shining and bluish-white in color, with here and there a few small thickened spots of a milky-white color. The spots, and the atrophied areas generally, were not so sensitive to pressure as were the red spots. In fact, the kraurotic changes seemed to have been nearly completed in the lower portion of the vulva, while they were still progressing in the upper portion.

The uterus measured a plus two inches in depth. A slight thin discharge escaped from the os. Thinking that the pruritus might pos-

9. *New York Medical Journal*, March, 1875.

sibly be caused, or at least aggravated, by the discharge, I inserted into the vagina, or had the patient to do so, twice a day, a dry absorbent cotton tampon to collect the discharge and prevent its escape into the vulva. This was continued for two weeks with no result.

Having, by this time, decided that nearly the whole trouble arose from the two purple spots, I applied to them equal parts of tincture of iodine and carbolic acid. This treatment resulted in a considerable diminution of the pruritus, but did not remove the spots. I then applied pure carbolic acid, which caused excruciating pain, but was, in a short time, followed by complete relief of the pruritus. These applications were continued from time to time, until the spots were entirely destroyed, or at least until they disappeared. Following the disappearance of these spots was a considerable, but not total, relief from the pruritus. Gradually the pruritus grew less and less until it, too, disappeared. In the two years, which have elapsed, since the cessation of treatment, there has been no return of the sensitive spots or of the pruritus.

### PUERPERAL FEVER.\*

BY S. G. DORR, M. D., BUFFALO.

There will be no effort made in this paper to run through the etiology, morbid anatomy, or mathematical percentage of the different subjects presented. Of all these things you have a well-founded, general knowledge.

There are but a few questions which I intend to present for your consideration this evening.

1. Is puerperal fever epidemic?
2. Does puerperal fever depend on a special germ which is pathognomonic?
3. Is it auto-genetic or self-infectious?
4. Does infection take place previous to labor?
5. Treatment.

1. *Is puerperal fever epidemic?*—The technical word epidemic as applied to disease, has several different meanings attached to it, all of which include the notion of general prevalence among a people or community. Some physicians, as well as writers, make contagion the essence of epidemicity. Etymology does not justify such a conception of the term epidemic. The best writers use the word as signifying wide-spread causes, such as atmospheric, acting at the same moment of time on many in-

dividuals, or as something regarding which speculation is vain and is referred to as an epidemic influence. The promiscuous use of the word epidemic in medical literature and medical talk is to be deplored; to the mind of the medical student it produces hopeless confusion.

There is plenty of testimony showing a connection between puerperal fever and the zymotic diseases, such as scarlatina, diphtheria, erysipelas, etc., but curiously there is an entire absence of testimony showing puerperal fever to be any more abundant during the prevalence of these diseases than at other times. The season of the year having more influence than any other factor outside of hospital infection, twice as many cases occur in the six months from December to May, as from June to November; and the smallest number of cases occurring during the year being in the months of September and October. This is not to be accounted for, however, by epidemic influence, but by the more constant contact of septic material during the Winter months. The outside air during cold weather is far more pure, but the inside air, the clothing, the bed and the house are more impure.

That deleterious material may find other channels for entering the system than a wounded surface, is evident. French writers report instances of toxemic conditions developing in young midwives during puerperal fever epidemics. When reading such reports I cannot feel safe in following the writer, for I feel he has mistaken frequently a cause for a result.

The point upon which I wish to dwell is that it is possible to trace epidemics of puerperal fever directly to the carrying of puerperal poisons from patient to patient through the media of attendants, instruments, and surroundings.

In theory, if not in practice, the doctrine of contagiousness has ceased to be a subject of dispute, and the epidemic idea is little ventured by the well-informed.

The majority of all medical literature at this time declares this fever to be an infectious disease, due to some form of septic inoculation of the genital tract; an infection in *point of fact* which might be operative in the *non-puerperal* condition, and which is developed and increased in activity or virulence by the parturient. The hypothesis for this increased activity or virulence is the fact that in the capillary net-work of the blood-vessels of the uterus a great difference exists between the puerperal and the non-puerperal organ.

In the non-puerperal uterus the blood current moves much more rapidly through the cap-

\*Read before the Buffalo Medical and Surgical Association.

illary blood-vessels than it does through the distended capillaries of the puerperal uterus.

It has been frequently demonstrated that when the micrococci come in contact with the red blood corpuscles in a state of rest or of but little motion, they—the red blood corpuscles—will stick together, forming thrombi and micrococci, very rapidly increase in numbers, whereas, in a blood current, the opposite condition prevails, viz.: no thrombi, no increase of micrococci. I am of those who believe there is no such thing as puerperal fever as a distinct disease, standing independent and alone. I believe it to be really a surgical fever, modified by the particular septic germs in conjunction with the physiological conditions which belong to the puerperal state, such as blood changes induced by pregnancy; the deep situation of puerperal wounds; the presence of clots even in the capillary net-work of the uterus; disintegrating and decomposing tissue; the ease with which lymphatic absorption takes place, the size of the veins already referred to, and the proximity of the peritoneal cavity.

2. *Does it depend on a special germ which is pathognomonic?*—Up to the present time no distinct specific bacterial form has been demonstrated (that I am aware of) peculiar to puerperal fever only, the different, though closely allied bacterium of pyemia, septicemia, gangrene, erysipelas and diphtheria, all having a common connecting link in being generated in putrefying media, seem to have the power of producing puerperal fever. Curiously, enough, the bacterium termo and bacterium commune, to which the putrefaction is largely due, are in themselves harmless, except it may be to produce putrid intoxication. We know clinically that we may have septicemia without pus, and know we may have abundant pus and no septicemia.

It has been demonstrated that the supposed harmless spores found on leaves, fruit, and even in supposed pure air, can by a succession of cultures be brought to flourish in a warm alkaline fluid, and that they acquire a capacity to penetrate living tissues, to proliferate in them, to excite necrosis and to cause death.

Doderlein, Van Ott and Winter, three eminent German bacteriologists, have, independently, examined the lochia of healthy lying-in-women to ascertain the presence of microbes. They all agree in their results viz.: that the lochia contained in the uterus are free from germs, while the discharges in the vagina contain abundance of germs of many different kinds. They also examined the secretions of the genital canal in

the unimpregnated state with corresponding result viz.: the secretions from the tubes and uterus were free from microbes, those from the vagina contained germs in great numbers and variety. These results harmonize with our clinical experience. They explain why a retained fetus and secundines in utero do not putrefy, while the same products, if detained in vagina, quickly decompose.

All of you must have been surprised and gratified at times to see that a dead fetus entombed in the uterus for months made no trouble; that when it was expelled it was brown, dry and mummified.

3. *Is it self-infectious?*—Here comes the question of self-infection; (a term which I prefer to auto-genetic). It is a practical point relative to treatment, and must settle the advisability of removing the contents of the uterus or not, and how is best to do it?

If there is no danger of self-infection, then it is best to let them alone. If there is danger of self-infection from the vagina, then vaginal antiseptics best be applied.

The uterine cavity of lying-in-women, where there was febrile symptoms, have been found to contain streptococci, and in women dying from septicemia, not only the uterus but every organ of the body contained them. Self-infection without a cause, I do not believe in, but a self-infection without contact of hands or instruments, I do believe may come from the vagina and other surroundings. I also believe that deleterious material may find other channels for entering the system than a wounded surface; but I am in doubt if there be cases of self-infection which result from processes within the patient herself, quite independent of the entry of germs, as is claimed by Dr. Barnes.

4. *Does infection take place previous to labor?*—The question of infection previous to labor is very obscure. It is important to know if it exists, and if such a condition does exist, then it is important to know what the noxious material may be and how it affects the patient.

I hope the members present, in their discussion, will be able to afford much light on the subject. It has been my fortune to have had several cases where a fever existed at the time or immediately subsequent to labor. I have no record of them only in memory. These cases have been frequently difficult, chronic and dangerous; more so, I think, than those where the infection occurred subsequent to labor.

It will be easily apprehended that it may arise in any period of pregnancy or of the puerperal state. It seems to me to be a metritis or

a parametritis, more than a phlebitis in the beginning; although these cases may result in a subsequent phlegmasia albolens, they, in my experience, more frequently result, however, in abscesses or peritonitis. We not frequently see the original inflammatory action of the womb and its immediate surroundings disappear, while the more remote parts of the body may be suffering acutely.

My experience has led me to believe that a septic infection does take place previous to labor and that it is a very different disease from that which occurs subsequent to labor. It is more chronic in all of its characteristics and more likely to form abscesses.

5. *Treatment.*—The present unanimity of treatment of this disease is curious. Most articles on the subject seem to wind up with curetting the uterus and bichloride irrigations. This monotony of treatment is broken, however, by differences of opinion relative to the percentage of the bichloride.

The young man must feel as though he had not discharged his duty to his patient, unless he has scraped the uterine cavity and irrigated the same with bichloride. I do not criticise the curetting of the uterus when it is necessary, but I do not think it is so very often necessary, and that frequently it is harmful rather than advantageous.

In regard to bichloride of mercury irrigations, I must say, I have been unfortunate in not having seen any remarkable good results from their use. I do not criticise the cleansing of the uterine cavity, but I think we have a better agent in iodine.

Iodine may not be the most powerful germicide, but its wide range of curative powers, in removing inflammations, healing sores and alterative action, makes it the better agent.

Bichloride of mercury is undoubtedly a good antiseptic for hands and instruments; they will be less colored by it than by iodine—then again, the hands and instruments differ widely from the diseased parts of the patient.

Pepper, in 1886, recommended the introducing of iodoform suppositories into the uterine cavity, which treatment I have tried with varying success. Sometimes the patient did better when the treatment was stopped; in fact, I have felt at times that the recovery of the patient was due to its suspension. That which has given me the most satisfaction for several years, has been the simple vaginal wash of compound tincture of iodine, one drachm to the pint of warm water—irrigation repeated every 6 to 8 hours. Upon this simple wash I have relied successfully in

those very bad cases of the disease which frequently appear in that locality where my lot is cast.

Treatment is determined in great measure by the tissue system which is predominately affected. There may be inflammation of the mucous membrane of the genitals only, or there may be inflammation of the uterine parenchyma, or inflammation of the peritoneum, covering the uterus and contiguous parts, or a phlebitis with pyemia or a septicemia, or an absorption of ptomaines with toxic affects—all these conditions are to be met with good judgment.

The fear of carrying the disease from patient to patient is great, but I now think quite unnecessary. When we feel that we are not common carriers in this respect, we are more brave. When we can show that the dirt, dust, filth, blood, heat, etc., will produce the disease, when taken in connection with the bacterium of every unwashed vagina, then you cannot fear to point out the true cause of the trouble to the patient and friends. So far as preventive medicine is concerned, I am convinced that antiseptic vaginal irrigations are sufficient.—*Buff. Med. and Surg. Journal.*

#### RECENT VIEWS ON DIABETES.

The *Lancet* says that diabetes is a disease full of interest, owing in great part to the lacune that still exist in our knowledge of its essential nature, and also of the affection standing as a type of disorders in which the processes of nutrition are gravely deranged; and upon which, in consequence, physiological inquiry has an obvious bearing. Dr. Saundby's able exposition of the varied lesions met with post mortem in diabetics, a lecture in which he condensed the results extended personal observation and study, is especially welcome, since it has dispelled once and for all the notion that morbid anatomy has little to teach on the matter. For, although it must be admitted that many of the lesions he described in the various organs of the body are such as could be adequately referred to the perverted nutritional processes of which the existence of glycosuria is only one indication, it cannot be denied that some of these changes may well stand in quite another relation to the disease itself. Dr. Saundby himself particularized the pancreatic lesions, and the even less constant changes that have been met with in the sympathetic system as having, perhaps, a causal importance. Indeed, there are few subjects more interesting to note than the revival of the notion, advanced by Lancelotti, that disorder of the pancreas can induce

diabetes; an opinion fortified by the experimental researches of von Mering and Minkowski, as well as by isolated cases of disease or extirpation of this organ in the human subject. At the same time it would appear that the relationship between pancreatic disease and diabetes is far from being constant. The Bradshaw lecture will be found of value in the incentive it will give to morbid anatomists to utilize their opportunities of making their records of diabetes as thorough and complete as possible; by following the lines laid down by the lecturer.

The debate at Berlin served to bring to a common point the wide experience of such eminent authorities as Pavy, Dujardin-Beaumetz, and Seegen upon the all-important question of the treatment of diabetes. Dr. Pavy, who opened the discussion, took the view that diabetes depends on the abnormal entrance into the general circulation of sugar derived from the ingested carbohydrates, rather than on the failure of the organism to destroy the sugar which has already gained entrance. Thus, he pointed out, the liver acts as a kind of storehouse, in which the products of carbohydrate ingestion are arrested normally, but that in diabetes this arrest does not take place, and the sugar entering the general circulation is eliminated by the urine. The phenomena of the disease are thus attributable to the waste of material which should naturally be utilized in the economy, and also to the presence in the blood of an excess of sugar. On these hypotheses he finds the *rationale* of the ordinary dietetic measures which seek to restrict the carbohydrate elements of food; but unless the natural power of assimilation of such material can be restored we cannot be said to cure diabetes. In opium and its derivations, morphine and codeine, Dr. Pavy thinks we possess remedies which aid in the restoration of this assimilative power. Dr. Dujardin-Beaumetz (whose paper was read in his absence) makes no distinction between glycosuria and diabetes mellitus, for, he remarks, the latter condition itself may be but a symptom of hepatic, pancreatic, or cerebral disease. Prognosis is based on the results of dietetic treatment; the mild cases being those in which a fortnight's restricted diet expels the sugar from the urine; while between this class and the severe intractable cases comes a category where the sugar, although much reduced in quantity, does not wholly disappear. A complete cure, is, in his opinion, rare; there always remains a glycosuric tendency. He alluded to the difficulty of making a healthy person diabetic by ingestion of large

quantities of sugar, and held that the nervous system had much to do with the initiation of the disorder. The essential thing in treatment is the regulation of diet, and the entire replacement of carbohydrates by fatty foods. He thought that a good and pleasant diabetic "bread" was still a desideratum, pointing out that "gluten breads" contain a considerable quantity of starch. Indeed, potatoes, which have only 8.5 per cent of carbohydrate, are preferable to gluten bread, which contains as much as 20 to 30 per cent. He forbids fruit, milk, and alcohol, but allows tea, coffee, maté, or kola. The use of saccharin was mentioned as a decided gain. Dr. Dujardin-Beaumetz also dwelt on the value of gymnastic exercises and hydro-therapeutics and the use of alkaline mineral waters; while for drugs he favors lithia, arsenic, quinine, bromide of potassium, and antipyrin.

Professor Seegen entered at somewhat greater length into the physiology of diabetes, pointing out that sugar is formed in the liver, but not, as Bernard taught, directly from glycogen, the destiny of which is to be converted into fat, and thus possibly to act as a reverse for sugar formation. For he holds that the liver can form sugar from albuminoids and fats, and that in health this sugar is utilized in the tissues in the production of heat and energy. Distinguishing two forms of diabetes, the mild and the severe, Professor Seegen thinks that in the former the sugar is derived directly from ingested carbohydrates, owing to the failure of the liver-cells to transform them into glycogen; but that in the severe forms sugar may still be formed, although no carbohydrates are taken; its retention in the blood is then due to a failure in tissue metabolism generally. In either case—although the duration of the disorder is so widely different—there can never be a *real* cure "in the sense that the patient may partake with impunity, as may the healthy, of an excess of starchy foods." He concurs with all other authorities in placing the dietetic treatment in the front rank; but is by no means so rigid in his prescription as most, for he finds that an absolute meat diet is not well tolerated, and cannot be enforced. The diet must therefore be such as will be agreeable to the patient, since he has practically to subsist on it all his days. There is no indication for giving him more meat than a healthy individual requires, and a small quantity (40 to 60 grammes) of bread may be allowed; besides green vegetables and acid fruits in moderation. Like Dr. Dujardin-Beaumetz, he spoke against gluten bread being con-

sidered as free from starch; if given at all, it should be in restricted quantity. The alkaline mineral waters, as Carlsbad, Vichy, and Neuenahr, seem to increase the tolerance for carbohydrate food; but Professor Seegen uttered a warning against encouraging people to travel far to health-resorts, as the fatigue involved is most injurious to diabetics.

Dr. Lepine also spoke, referring particularly to his repetition of the experiments on extirpation of the pancreas by von Mering and Minkowski, and attributing the production of glycosuria thereby to the absence of a sugar-destroying ferment formed in the pancreas. Professor Cantani said that in the "alimentary diabetes" so common in Italy, the restriction of diet to fats and proteids was most useful, but it had less value in cases of neurogenic origin. He only regarded these cases as *cured* when the urine remained free from sugar, in spite of the ingestion of considerable amounts of carbohydrates; and although in many such cases, in the course of years, the diabetes again appeared he looked upon such reappearance as a fresh attack of the disorder and not as a relapse. Opium he regarded as harmful.—*Medical Record*,

#### HOW SOME TRY TO PASS THE NAVAL MEDICAL BOARD.

Medical Director Delavan Bloodgood, United States Navy, in responding to the toast of the Medical Corps of the Navy at the banquet of the Medical Society of the State of New York, among many other good things said: "A wrong impression has gotten abroad that great and increasing gaps exist in our ranks. There are a moderate number of vacancies in the grade of assistant surgeons, but more than enough available candidates for the places are booked and waiting examination. Now I desire to explain a bit concerning our required examination, and the bruit that it is too 'exacting.' The origin of the complaint cannot better be demonstrated than by some quotations from the records of the Examining Board. Bear in mind, gentlemen, please, that all these candidates, whose essays I will cite, hold the degree of Doctor of Medicine, and many of them the baccalaureate also, and several were practitioners of from one to three years' standing. Thus one writes in making his application: 'I am a graduate of the Medical College of ———, and I think I can fit the bill. Is there any vacancies now? Is the examination as rigid as reported? I am a lover of surgery and hope I will fit the bill.' One aspirant was asked in the oral examination,

'Who was Hannibal?' 'Hannibal was a Hun and a Vandal,' he replied; next, 'How did Hannibal get into Spain?' and answered: 'He must have crossed around through Asia.' Question to another: 'Who succeeded Julius Cæsar?' 'Pontius Pilate,' was his prompt reply. Another answered that 'the Suez Canal connects the Atlantic and Pacific Oceans at Panama.' One stated that 'Galen, who was born in the eighteenth century, discovered the circulation of the blood;' another mentioned that 'Harvey was a celebrated electrician.' One doctor had never heard of Jenner, but another knew all about him, and said that Jenner lived before Christ and practised vaccination in India, where he was born. One, when directed to write a prescription in Latin, said, 'We don't write Latin prescriptions out in ——— County.' Another sent this note from his writing-table to the president of the Board: 'Sir, you ask me in your question, 'What is the mediastinum?' As I never heard of it I would like to have your advice about withdrawing from the examination.' Another wrote in answer that 'phimosis is a disease coming on in old age.' One, who had been in practice for two years in a large city, closed his remarkably original treatise on diarrhea thus: 'But the best treatment of all to be given is them old pills found in shops and other places about town.' And here is another doctor's exhaustive thesis on opium: 'Opium is grown extensively, that is the trees from which the gum opium is obtained, in the West Indies. The tree grows a small papula, which is of a gummy consistence; this is then gathered and the inside of the papula is then formed upon cakes or lumps, in which way it is transported to market. It is also grown in some of those foreign countries, like China, which produces a very superior article. I find that opium is not borne as well by the stomic as codei. This active salt, which is very soluble in aqua, gives us a form of giving the effects of narcotism in very minute doses.' These candidates, and very many others like them, and but only they, denounce our examinations as too exacting; and this is the way one of them, not unlike the worm, turned and addressed the president of the Board: 'Sir, in your conversation with me you made a simile, the fore part of which I have forgotten because I was so forcibly struck with the latter part, which was that something was like a man having won a girl's love he then cared nothing for it. Owing to your, at that time, superior position I said nothing. As I said nothing you may have thought that I agreed with you. The difference in our position was removed by you rejecting me as a candidate. I

now say that I do not agree with the sentiment. On the contrary, I believe that if there is one thing more than another which relieves life of its bareness and renders it worth living is the love of a true woman, and the longer a man has won that love, and the more he has fathomed its depth, the more he will value it, if he be a man. And further allow me to say that in my opinion the most despicable individual on the face of God's earth is he under the guise of a pleasing exterior seeks to win a pure girl's love, simply that he may have the diabolical pleasure of tramping upon it. I could not leave you under the impression that I had such an opinion of my fellow-men, in general, as agreement with you would signify. Should even twenty years' service in the Navy force upon me such an opinion, I thank you for rejecting me; contact with my fellow-men in private life will, I am sure, show me a better side of human nature than that. I have had my say. Yours, M. D."

### STRANGULATED HERNIA\*

BY DR. W. S. TREMAINE, BUFFALO, N. Y.

Dr. Tremaine said that he was well aware that he had not chosen a very new subject, but he also knew that it was not worn so threadbare but that it might afford material for some practical points for the general practitioner. Twenty or thirty years ago our teachers said that in cases of strangulated hernia, we were to continue our efforts at reduction for a long time, and avoid, if possible, an operation. There remains with the older men, more or less of the traces of this early teaching, and he has occasion as a consultant to meet with it now and then. The first point of his remarks was directed to the absolute necessity of early operation in cases of strangulation, if gentle taxis failed to reduce. No case of strangulated hernia will die from an operation, if in proper hands; but will surely die if let alone, and especially if too great and vigorous efforts at reduction are used. Every man who practices when he is not within easy reach of a competent surgeon, should know how to operate for strangulated hernia. A practitioner on encountering a case of strangulated hernia, should either send at once for a consultant, or explain the risks of an operation and the necessity for one. Then, if under chloroform a reduction with slight and exceedingly gentle taxis cannot be secured, the hernia is to be attacked, the sac opened, and the constriction found and released. He related a case where, from the severe and

prolonged efforts at taxis, he found the gut black, and he hesitated whether to return it to the peritoneal cavity, or make an artificial anus. He remembered Sir Astley Cooper's axiom: "That the belly is the best place for a gangrenous gut," and slipped it back. The case made a good recovery. Dr. Tremaine's second point was in relation to the so-called "radical cures of hernia," which he believes ought to be termed "attempted radical cures." We are as yet a long way from being at the bottom of this matter. There is at present a sort of rage for operating on cases of hernia, mostly because of the simplicity of the operation, and the comparatively small risks. In cases with small sacs, little gut, or perhaps mostly omentum, he would not operate. There is now a current setting in the other direction, and a re-action against this promiscuous operating is taking place. He mentioned a case where it was exceedingly difficult to isolate the sac, the hernia was omental, and had probably never been entirely reduced; he found the cord, the testicle, the omentum, and the sac, one intricate, tangled mass, and was compelled to remove the whole. It was a question of moment, in this case, whether he ought to have removed the testicle without the patient's consent; all of the attending circumstances certainly justified his decision to do so. There is no fixed point at present from which we can decide whether we ought to attempt a radical cure or not. Dr. Tremaine believes that, if the patient be a person who works by his brain, and not by arduous labor, and whose rupture is easily retained by a simple truss, that such a case should be left unoperated. If, however, the patient be one who does great muscular labor, and who cannot maintain his hernia within the abdomen easily by a truss, then in such a case we should attempt a radical cure. In cases of strangulation, and irreducible cases, it is a question yet unsettled, whether, when operating for relief, we should attempt to get a radical cure also. In these last cases deaths do occur, and we cannot always say from what cause, either.

The patient's life is always to be the first consideration, and whatever arises, the consultants judgment ought to prevail,—*Buffalo Medical and Surgical Journal*.

**Ether Drinking.**—Ether drinking is said to be on the increase. In the north of Ireland particularly has this intoxicant become quite popular. Its effect is speedy, but soon passes off. It is cheap, and a dessert spoonful will serve to intoxicate.

\*Read at the Buffalo Medical and Surgical Association

## THERAPEUTIC MEMORANDA.

**Battles Bromidia and Papine:**—The hypnotic and anodyne are two of the happiest combinations among therapeutic agents. All who use them fall in love with them.

**Lambert's Listerine** has become one of the most commonly employed remedies for catarrh of the nose. It is easily applied locally and is quite agreeable and beneficial.

**Fellow's Hypo-phosphites** Sustains its high and well earned reputation in every English speaking country. The medical profession has unlimited confidence in it.

**Sulfonal-Bayer Phenacetine and Salol** are daily increasing in popularity and are prescribed almost as frequently as quinine. They are now much more frequently prescribed in combination than separately.

**Farchild's Pepsin**,—cannot be too highly recommended. It is pretty hard to make a physician, who has ever used it, discard it for any other make of pepsin. Its adherents are becoming quite numerous in the west.

**Uric Solvent and Viburnum Compound**—Hayden are manufactured by the New York Pharmaceutical Company, Bedford, Mass. They are both increasing in their field of usefulness. Dr. Hayden's Viburnum Combined is particularly of positive value in several painful female disorders. Gynecologists who have used it for many years are still giving it extensive employment.

Wm. R. Warner & Co's., pharmaceutical preparations are very numerous, elegant and trustworthy. Physicians when prescribing Warner's goods know that they are exactly as represented, a very desirable feature indeed. Warner may always be specified with full assurance that the value is in the drugs. This cannot be said of all houses, notably one in Cincinnati, Ohio.

**Bromidia.**—Eclampsia of infants and children. In eclampsia of infants and children, hystera, paroxysms of epilepsy and cases of extreme nervous prostration in women de-

pendent upon severe mental strain, Peacock's bromides is superior to anything I have ever used.

T. H. VONKLEECK, M. D.

Philadelphia, Pa.

**The Civil, Military, and Naval Departments** of the British government are supplied with the Fairchild Digestive products and the Fairchild preparations for the predigestion, of milk, etc., are especially preferred in India.

**Stanley's** recent Emin expedition was equipped entirely with Fairchild's Digestive Ferments in preference to any others, and in the recent attack of gastritis from which Mr. Stanley suffered, he was entirely sustained upon foods previously digested with Fairchild's Extraction Pancreatis.

**Spencer S. Dunn, M. B. and C. M.**, Osbornville, Kings' Heath, Birmingham, Sept. 5, 1890. Dear Sir: I have found Pil Aphrodisiaca (Lilly), in cases of extreme exhaustion and mental apathy from overwork and continued anxiety, very beneficial in promoting a good appetite, refreshing sleep and giving tone to the whole nervous system. In such cases I order one pill three times a day, for two days; I then give four pills during twenty-four hours. At the end of ten days the patient is taking eight pills in the twenty-four hours, and by this time is generally better.

**A. Page, M. D.**, Rushmore, Ohio, says: I have prescribed Aletris Cortial (Rio) in preference to all other similar preparations for a period of two years with no failure in a single instance. I also spoke of its merits in our last meeting of the Northwestern Ohio Medical Association, in a paper which I read before that body. I treated a case of a young lady of twenty-three who had been troubled with excessive menstruation for five years amounting almost to a hemorrhage, at each period, and lasting ten days. Prescribed Aletris Cordial to be taken in drachm doses four times a day, commencing five days before each period; the first bottle reduced the discharge perceptibly and shortened the duration from ten to six days, ordered it to be taken during the interim of the next period and the result was almost magical, the second period being reduced to four days which was normal and the discharge the same. The patient has now been eight months without any treatment and she, as also myself considers the case permanently cured.

# Kansas City Medical Record.

A MONTHLY JOURNAL OF

## MEDICINE AND SURGERY

A. L. FULTON, M. D., }  
GEO. HALLEY, M. D., } Editors and Proprietors.

J. H. THOMPSON, M. D., Associate Editor.

*Original contributions and reports of cases in practice are especially invited.*

*All communications to be addressed to the EDITORS  
KANSAS CITY MEDICAL RECORD, Kansas City, Mo.*

*Subscribers may remit by bank check, postal money order, postal note, or registered letter.*

*Subscribers desiring Medical Books, Surgical Instruments, or Appliances, may have them selected by us and sent to them, without extra charge for our services.*

NOVEMBER, 1890.

## EDITORIAL.

### THE QUESTION OF CIRCULATION.

For some months past there seems to have been developing a mania among a few journalists regarding circulation. *The Kansas City Medical Index* was among the first to open the discussion which it has kept up with slight remissions during the summer.

We do not understand the purport of so much talk. If it is done for the purpose of influencing advertisers the discussion will fall still-born. Advertisers are as bright and observing as the proprietors of the journals in question and cannot therefore be deceived by claims made through the editorial columns of a medical journal. They require greater proof of the subscription list and standing of a medical journal than this. They require something more even than the figures in a *newspaper* directory. *Newspaper Directories* use the figures sent them, and if not furnished with a state-

ment the previous directory statements are utilized. They are not responsible for misstatements sent to them.

Advertisers are usually acquainted with the reputation of journals, and when contracting space cannot be misled by reference to this or that Newspaper Directory. They know how easy it is to tell a falsehood by implication. Therefore if they are ordinarily bright, and desire the *bona fide* subscription list of a journal, they ask for a direct answer over the signature of the editor or publisher as a basis.

If the vain boasts are calculated for the eye of the readers of Medical literature they will miscarry. The intelligent physician cares naught for the length of the subscription list of this or that journal. He wants good quality and quantity of reading matter. He wants no trashy items. He can get that in the daily press. He desires information upon medical and surgical topics and not "circulation." The reader does not care whether the figure *two* or *four* is employed as a multiplier in computing the circulation. He is quite indifferent regarding the elasticity of the editor's conscience in matters of this character provided he is truthful in the pages of his journal in the presentation of facts relative to medicine as he understands it.

It has been the aim of the RECORD to build its circulation on its merit. No boasting or caviling has marred its pages. It has jealously guarded against publishing anything not of service to the medical profession. To this end it has drawn liberally from exchanges, and it may be said without jeopardizing good taste that in every effort it has been successful.

If our readers will pardon us for making one boastful remark, in parenthesis, thus taking a single step beyond editorial propriety; we will say without fear of successful contradiction that the RECORD can show a *bona fide* subscription list twice as large as the journals making the most disturbance, with several hundred to spare, the *Kansas City Medical Index* not excepted. In making this assertion we are aware that it is of no interest to our readers, but stating the fact may serve the purpose of suppressing a nuisance.

## TERTIARY SYPHILIS.

Probably the most efficient causes for producing tertiary syphilis are: 1. Insufficiency of treatment. 2. Constitutional vices, such as tuberculosis. 3. All the causes of impaired nutrition.

The most frequent time of the appearance of the third stage symptoms is between the third and sixth year.

M. Fournier, in a statistical study of two thousand six hundred cases observed in the city of Paris, states very positively that the frequency of tertiary syphilis increases up to the third year, when it reaches its greatest height. From the fourth to the eleventh year it declines rapidly in frequency, and then more slowly, ceasing practically after the thirtieth year. Contrary to the usual opinion, he states that the nervous centers are more often affected than any other organic system. He is figuring on 1,085 cases of nervous syphilis, as against 787 cutaneous, and 612 mucous syphilides. Among 4,429 cases, there were 1,085, or about one third in which the nervous system was affected. Assuming that ten per cent of all persons who contract syphilis, develop tertiary symptoms, it follows that there are four per cent. who contract syphilis will suffer from complications affecting the nervous system. The brain is most often affected, and after this comes degenerative affections of the spinal cord, such as locomotor ataxia.

Dr. Haslund, of Copenhagen, places stress upon alcoholism, malarial infection, and intolerance of the patient to the use of mercury as efficient, being causes tending to tertiary syphilis.

Possibly the strain incident to modern civilization has much to do with the increasing frequency of the involvement of the nervous system in syphilis. For certainly if these statistics are to be relied on the nervous centers are now more often affected in syphilis than they used to be.

Dr. Fulton, of the RECORD, has gone to Canada to attend the funeral of his aged mother, whose death occurred at St. Thomas, on the 30th ult.

## "What shall we do to be saved?"—

Under this caption Dr. C. B. Hewett of this city, read an interesting paper at the annual meeting of the State Association of the Missouri Dentists, and published in the *Western Dental Journal*. Among many other subjects, he referred to the vitiated air in the operating room and the unnatural position of the operator while doing his work on the mouth. We are in sympathy with the Doctor of Dentistry who has to stand for hours performing a delicate operation on the teeth of patients with foul breath. People with bad teeth, often neglected, usually have foul breath which expired in the face of the doctor is, to say the very least, slightly disagreeable. The cramped position of the operator is a small matter compared with the carbonic acid gas and the matter which he is forced to breathe and appear to enjoy.

Another feature in the practice of dentistry mentioned in the paper is not the least distressing. We refer to the nervous element. Screaming women, crying children, and "cussing" men, are very trying to the nervous system of the ordinary sympathetic, moral and refined Doctors of Dentistry. Considering the work required of them, the dentist should be the best paid for his services of any of the professions.

**Cystitis or Irritable Bladder in Women.**—This distressing and troublesome complaint so frequent among women may be afforded relief in most cases by dilating the urethra to its fullest capacity, and applying a mixture of iodine and glycerine to the vesical mucous membrane of the bladder, after having it washed out with warm water and boracic acid. A few treatments in this way will be sufficient to cure a majority of the cases.

**Hernia.**—It is stated in one of our exchanges that by means of ether properly applied, nearly every case of hernia may be speedily relieved. The following course is recommended: Place a piece of absorbant cotton over the tumor and saturate with ether. No operation for hernia will ever be needed when this plan is followed for sufficient time.

**Lupus Vulgaris.—Treatment by Electrolysis.**—Dr. G. T. Jackson (*Boston Medical and Surgical Journal*) says of electrolysis;

1. It is comparatively painless, and there is no need of putting the patient under an anesthetic.

2. There is not the slightest loss of blood, and thus there is no dread of a surgical operation.

3. The patient is not kept a moment from his regular business. There is no deformity caused by the treatment. There is no after-treatment or application to mar the appearance. He is also spared the discomfort of a swollen face and eyes, the ordinary attendant on the arsenical or pyrogallic acid treatment.

4. The treatment goes to the root of the disease, to the bottom of the tubercle, with far more exactness and less damage to the surrounding skin than any other caustic or surgical method.

5. The scar left is smooth and not unsightly.

6. The result obtained is as good, if not better than that by any previous method.

**Obituary.**—The death of Dr. Ed. M. Small, of Sedalia, Mo., is a loss to the medical profession of Missouri, and a much sadder loss to his family and relatives. Dr. Small was a typical gentleman, cultured and highly educated. He was for several years, and at the time of his death chief surgeon of the M., K. & T. R. R. He was still a young man, although of ripe experience. He had been ailing for some time, and went to New York, and there submitted to a surgical operation terminating in his death. His father, who is one of the best and most favorably known physicians in this State, resides at Sedalia, where he has an extensive practice and an enviable reputation.

**Deep Breathing.**—Radical cure of nasal polypi. Dr. E. H. Griffin (*Medical Record*) says:

1. The nose should be treated with the snare till each and every polypus has been removed.

2. That the after-treatment by caustics and

cautery tends to inflame the cavity, and tends to the recurrence of these growths.

3. That in the removal of these tumors, the parts should be so thoroughly anesthetized that pain is unknown, because when pain is absent and the part under the full influence of cocaine, the blood-vessels are relieved of their congestion, the polypi are more easily distinguished, and the main object of the operation is secured, viz., removal of the pedicle intact.

4. That the part should be sprayed thoroughly with either witch-hazel or alcohol, for some time after the patient has been pronounced free from all polypi.

5. That with this treatment the majority of cases can be permanently cured, and the rest greatly relieved.

**The following good rules for the practice of deep breathing are given by the *Medical Brief*:** 1. Stand erect, the feet separated, the right slightly in advance. 2. Shoulders and head in natural position. 3. Hands lying lightly on the abdomen, the fingers pointing to the umbilicus. Compliance with this rule enables the child to be sure she is using the abdominal as well as the pectoral muscles in respiration. 4. Empty the lungs of air, then close the mouth. 5. Inhale slowly through the nostrils, using abdominal as well as chest muscles. The lungs thus receive the utmost possible amount of pure oxygen, and the muscles have exercise. 6. Hold the breath as long as possible, and meanwhile use the ordinary calisthenic exercises. 7. Never exercise except with the chest well expanded with air. 8. Exhale slowly, enunciating the vowel sounds as the air passes the lips.

**Parke, Davis & Company** recently gave a public test, in their Kansas City house, of the quality of their pepsin. The test was made under the management of their accomplished agent, Dr. Wood. A large number of physicians were present, by invitation, to witness the trial, and all expressed themselves as highly pleased with the result.

**A Vigorous Centenarian.**—There is living in Bolivar, Pa., an old gentleman, named William Reese, who was born in England on June 15, 1778. He has always enjoyed excellent health, the only illness that he can recall being a slight attack of sciatica a few years ago. His hearing is impaired, but his eyesight is still good, and he can read without the aid of glasses. He was always very temperate in every way, having made it a rule to rise from the table unsatisfied, and although he is a pretty constant smoker, his method is to go out on the porch for a few whiffs and then return to his seat at the fireside. He is a very interesting old man to talk with, and steadily declines all assistance but that of his cane in going about. His father and grandfather are both said to have lived to be over a hundred years old, and his mother also had passed the century line at the time of her death. He has had five sons and five daughters, all of whom lived to maturity, but the special strength of constitution seems to have been inherited only in the male line. Of the sons but one is dead, and he was killed in the war, while of the daughters three are dead, one from phthisis, another from cancer of the breast, and the third from ovarian cyst.

**Nerve Grafting.**—Nerve grafting promises nearly as good results as skin grafting. Portions of nerves several inches long have been taken from amputated limbs and placed in the gap where a portion of nerve had been cut away. The nerve thus placed in the gap should be carefully fitted in between the cut ends without allowing any tension on the nerve. It should be secured by cat gut sutures and covered up. While the sensation is usually imperfectly restored, the operation gives a fairly good result.

**Troublesome Itching.**—Itching of the skin is a common complaint. To relieve it, we must remove the cause, if it can be found. In eczema, itching is very commonly met with, and for its relief nothing is found to be so effectual as a mixture of equal parts of lime-

water and glycerine, applied to the skin as often as necessary. You may combine with this a little creasote or commercial carbonate of zinc. No other combination will allay the irritation and relieve the edema any better.

### Webster's International Dictionary.

—Physicians, or others, desiring a dictionary should be careful to select the one with the above title. A few weeks ago we met a friend with a *Webster's Unabridged Dictionary* which he had purchased for \$1.80. He bought it under the impression that it was the very latest edition, which its external appearance indicated. When informed that it was a reprint of the forty-year-old edition, he was disgusted beyond description. He had simply been duped, the volume being almost worthless. He could have bought a second-hand, much later edition, for less money. An old dictionary like it is as worthless as an old directory. We gave away our 1864 edition, which is much more complete than this, when we saw the new *Webster's International Dictionary*. It is a marvel of beauty, it is perfection, and is the best dictionary in the English language and should be on the table of every person who needs one and can afford it. Money spent for the worthless deception referred to above is wasted.

**Freckles.**—For freckles the *Pharm. Era* directs to use bismuth subnitrate, two drachms, with simple ointment, two ounces. Apply at night and remove in the morning with cold cream. Another is: R White precipitate, subnitrate of bismuth, of each four parts. Glycerite of starch, fifteen parts. Apply every second day to the freckles.

**Florida Climate.**—To those of the West who desire to spend a few weeks in the Florida climate, during our more disagreeable winter weather here, the Kansas City, Memphis & Birmingham Route (Gulf Road) offers the very best inducements for travel, in the way of greatly reduced rates, well equipped road, direct route and fine accommodations.

## BOOK REVIEWS.

**Medical Diagnosis with Special Reference to Practical Medicine.**—(*DaCosta*)

—This is the second revised edition of this popular text-book by J. M. DaCosta, M. D., LL. D., Professor of Practice of Medicine and of Clinical Medicine at the Jefferson Medical College, Philadelphia, etc.

The merits of the former editions are well known to most practitioners and by them highly esteemed.

It is a most comprehensive treatise on diagnoses, yet not tedious or voluminous. Each disease is so clearly and accurately described that it stands out with clear cut features before the reader.

The classification is almost purely clinical, the diseases being grouped according to their marked symptoms. This is of advantage to the student, who first learns the course and symptoms of a disease and its pathology later.

Many of the older practitioners have the former editions, but they will find a perusal of this interesting; those who have not, and the later graduates, cannot find a more useful and interesting work than this one.

Its compact size, its clean type, and its accuracy in description of diseases all point to its continued popularity. J. B. Lippincott Co., Philadelphia, Publishers. For sale at H. M. Dickens & Co. Price, \$6.00 (cash.)

**A Dictionary of Practical Medicine.**

—FOWLER. This work is written by various writers, prominent in the English profession, and edited by James K. Fowler, M. A., M. D. senior assistant physician to the Middlesex Hospital, etc., etc. It gives in a concise form an account of the more important subjects coming under the head of practical medicine and diseases of women. Subjects belonging to surgery are not touched in this work save those that could not be excluded in treating of diseases of women. It gives a brief account of the symptoms, course, diagnosis and treat-

ment with the exact dose and combination of various drugs recommended in each disease also frequently giving the pathology and morbid anatomy. We find it a most excellent work showing great discrimination on the part of the author in making it so concise, yet covering such a scope. It will be of great value to both the young and busy practitioner.

P. Blakiston, Son & Co., Philadelphia, publishers.

For sale by H. M. Dickinson & Co.

## BOOK NOTICES.

**BACTERIOLOGICAL TECHNOLOGY FOR PHYSICIANS** with Seventy-two Figures in the Text. By Dr. C. J. Solomonsen. Authorized Translation from the Second Revised Danish Edition, by William Trelease. William Wood & Co., New York.

**A TREATISE ON THE DISEASES OF INFANCY AND CHILDHOOD.** By J. Lewis Smith, M. D., Clinical Professor of Diseases of Children, Bellevue Hospital Medical College, Physician to the New York Foundling Asylum, etc. Seventh Edition. Thoroughly revised. with 51 illustrations. Lea Bros. & Co., Philadelphia, Pa.

**MODERN SURGERY ROBERTS.** By John B. Roberts, A. M. M. D., Professor of Surgery in the Woman's Medical College of Pennsylvania, Professor of Anatomy and Surgery in the Philadelphia Polyclinic, Lecturer in Anatomy in the University of Pennsylvania, With 501 illustrations. Lea Bros. & Co., Philadelphia, Pa.

**THE MEDICAL STUDENTS' MANUAL OF CHEMISTRY.** By R. A. Wiltbous, A. M. M. D., Professor of Chemistry and Physics in the University of the City of New York, Professor of Chemistry and Toxicology in the University of Vermont, Member of the American Association for the Advancement of Science. Third Edition. William Wood & Co., New York.

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**EDITORIAL AND MISCELLANY.**


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**Dr. E. Von Quast**, of this city has returned from Europe where he has been for the past five months.

**Impotency.**—A reliable remedy. R. Tinct. Sanguinaria, 1 oz.; ext. Stillingia, 1 oz.; celerina, [Rio] 6 oz.; M. Sig. Teaspoonful four times daily.

**Bleeding from the Nose.**—Wade recommends the expedient of Hutchinson. The hands and feet of the patient are placed in water as hot as can be borne. This will check the most obstinate epistaxis, without any ill consequences. —*Brief.*

**The Southern Surgical and Gynecological Association** will hold its meeting in Atlanta, Georgia, Nov. 11, 12, and 13, 1890. George J. Engleman, M. D., of St. Louis, is president of the Society, and W. E. B. Davis, M. D., Birmingham, Ala., secretary.

**Bacteria in Hail-stones.**—Dr. Fontin has examined the water from melted hail-stones, and found it to contain a number of varieties of bacteria, among them being the already known bacillus mycoides, liquefacius, leutens, sarcina lutex, and aurantiaca. Besides these, cultures of four other kinds were obtained, one of which was found by experiments on animals to be pathogenic. It is suggested that, since hail, snow, and rain are found to contain pathogenic bacteria, there may be a specific disease that can be the direct result of being wet through in a storm.

**Hematuria and Gorden Rhubarb.**—Several correspondents of the *Lancet* have recently reported some unusual urinary troubles, consequent upon eating ordinary rhubarb, or pie plant, as it is commonly called. The symptoms are frequent micturition, hamaturia, dysuria, and lumbar pains. This effect of the rhubarb seems dependent upon the use of hard water for drinking purposes, the oxalic acid of the

rhubarb combining with the calcium in the water and forming numerous small crystals of oxalate of calcium that—it is suggested—lacerate the uriniferous tubules in passing through them. Similar consequences have been noted of eating gooseberries and acid apples; and an explanation of obscure urinary troubles in localities where hard water is used is thus offered.—*N. Y. Med. Journal.*

**Manslaughter by a Faith Healer.**—The practice of faith healing has received a severe check, if not its death blow, in the city of Toronto. A certain well-known citizen, who had for some time been the subject of diabetes, and had been dieted for it, thought he would give himself the benefit of the newest fashion, and accordingly placed himself in the hands of a Mrs. Stewart, one of the apostles of the new art. Being by her instruction freed from all dietetic restrictions, he speedily died of diabetic coma, and an inquest being held the jury found that "he came by his death through the gross ignorance of Mrs. Stewart, who undertook to cure him of his disease, in not advising him to continue the restricted diet prescribed by his former physician." Mrs. Stewart is consequently now awaiting her trial for manslaughter. We forbear to comment on a case which is still *sub judice*.—*Times and Register.*

**Dr. Wm. Osler**, in *N. Y. Medical Journal*, says that the impression received during his late visit to the German Universities may be stated as follows: The characteristic which stands out in bold relief in German scientific life is the paramount importance of knowledge for its own sake. To know certain things thoroughly, and to contribute to an increase of our knowledge of them, seems to satisfy the ambition of many of the best minds. The presence in every medical center of a class of men devoted to scientific work gives a totally indifferent aspect to professional aspirations. With the English-speaking people, the young man starts with an ardent desire to devote his life to science, but he is soon dragged into the mill of practice, and at forty years of age his work

bears the "guinea stamp." His aspirations and early years of sacrifice have done him good, but we are the losers, and we miss sadly the heaven which such a class would bring into our professional life.—*American Lancet*.

**Hysterical Facial Paralysis.**—The statement of Charcot that paralysis of the facial nerve, is never of hysterical origin, has recently been negatived by Huet (*Nederl. Tijds. v. Geneeskde.*—*Cent.-Bl. f. Nervenheilkde*) who reports a typical case of central paralysis of the facial nerve in a girl twenty-one years of age. The trouble came on immediately after a severe fright, and was followed by pronounced symptoms of hysteria, globus painful points, vomiting, hemi-anesthesia, etc. Later hysterio-epileptic attacks developed, and she presented a complete picture of hysteria gravis. Van Deventer also mentions a case in which facial paralysis came on in April and was still noticeable the following October. A later observation showed that the paralysis had entirely disappeared. This patient also presented the typical features of hysteria gravis.—*The Journal*.

**An Undescribed Trophic Affection of the third Phalanges.**—Rosenbach (*Central-Blatt für Nerven Heilkunde*, August, 1890) claims to have discovered a hitherto undescribed trophic disturbance in the third phalanges. The disease consists essentially of an enlargement of the tubercle at the base of the phalanx, preceded and accompanied by pain in the part. The disease is most exclusively found in women, from 30 to 50 years of age, and is especially frequent in those approaching the climacteric. The author has seen one or two cases of the trouble in man, but it is relatively very infrequent as compared with the number of women attacked. The disease is usually symmetrical, attacking both hands in the same way, and confines itself strictly to the dorsal side of the third phalanx, the thumb always remaining free. It is preceded and accompanied by changes in sensibility, formications, heat flashes,

numbness, etc., in the region of the ulnar and radial nerves.

The author attributes the affection to trophic disturbances in the nervous supply of the periosteum, similar to the special changes in the nerves of the skin, found in herpes.

The differential diagnosis lies between arthritis deformans and gout. The first is distinguished by a very different localization in the large joints and in the thumb, the irregularity of the swelling, and the involvement of the joint surfaces which remain free in the trophic disturbances under consideration. Gout is less easily differentiated, but here we have the general diathesis and above all the slow increase in the enlargements, without redness or swelling of the parts, and the peculiar local nervous symptoms are wanting.—*The Journal*.

**Neurasthenia and Nasal Disease.**—

The causes of neurasthenia, obscure as they are, are not to be sought in some slightly abnormal condition of an organ such as the nose; and to imagine that local treatment of this, or indeed of any individual organ, is going to reward us with successful therapeutic result, is to subject ourselves to such failures as Dr. More Madden very honestly has recorded. Many women live only for the gynecologist, and though we would not for a moment impute such conduct to members of a noble profession, there is no doubt that gynecology, in some unscrupulous hands, has not been free from chicanery in a class of patients in whom the loss of nervous control, which is the essence of neurasthenia, has rendered them ready agents to such practices. It would be a thousand pities where rhinology to incur the same reproach. To remove a vital cause of irritation is right and proper, but to assert that the slight pathological abnormalities met with in nasal organs, even when they are accompanied with nasal catarrhs, is in a real proportion of neurasthenic individuals a potent cause of their troubles is, we think, to take up an untenable position. Those who, in such cases; look only to intra-nasal surgical treatment, and fail to appreciate the necessity of getting behind these apparent symptoms, and treating the general

nervous system as of primary importance, will be doomed in their specialistic narrowness to failure. To say that such treatment, even if it does no good, will do no harm, is not correct. Very great aggravation of the patient's sufferings may follow injudicious and meddling interference. It is in neurasthenic patients, of all others, that we should exercise the very greatest discrimination in recommending or carrying out surgical treatment.—*Journal of Laryngology and Rhinology*.

**Lateral Prostatectomy.**—Dittel (*Wiener Klin. Wochenschr.*) refers the retention in hypertrophy of the prostate largely to the lateral lobes, and thinks that any operation must reach these lobes in order to overcome their valvular action in causing retention. This was shown by experiments upon cadavers. When a body with normal urethra and bladder was suspended, water injected into the bladder, promptly passed out by the urethra; such, however, was not the case where the prostate was enlarged bilaterally. In these latter cases, when a resection was made of the lateral lobe, the fluid passed rapidly away. The excision of a wedge-shaped piece from the middle lobe was without result.

Dittel has not as yet tried his method upon a living patient but gives full directions regarding the best methods of operating, from his dissection of cadavers. The incision should begin at the point of the ischium and extend to the middle of the external sphincter, circling the latter as far as the raphè. This cut opens the ischio-rectal fossa from which the dissection is rapidly made exposing the lateral lobe of the prostate. The rectum should be previously tamponed, to prevent wounding and aid in separating that structure from the enlarged prostate.

The author recommends an early operation in these cases, while the urine is yet normal and the patient comparatively free from pain.—*The Journal*.

**The Prophylaxis of Phthisis.**—At a recent meeting of the Académie de Médecine

M. Villemain read a report on the prophylaxis of phthisis. The author said that of all the maladies phthisis, or, more strictly speaking, tuberculosis, in all its forms made the most victims. In large towns it frequently caused a fourth of the deaths. It was, moreover, essentially infectious, and the infection was due to a microbe *sui generis*, which independently of direct transmission, penetrated into the organism by the lungs, the digestive canal by the air and food the skin and mucous membranes by scratches, wounds, etc. The most frequent and most redoubtable source of contagion resides in the expectoration of phthisical patients, and then more especially when it is dry and reduced, so to speak, to powder, which change promptly takes place, when, as among the lower class, the floor, walls, and bedcloths are covered with it. Later, when the floor is swept this dust rises and enters the lungs, deposits itself on everything, and constitutes thereby a permanent danger to those who sojourn in this tainted atmosphere. The dejections of patients contained also the contagious principle. From the foregoing it resulted that very particular precautions should be taken in the treatment of phthisical patients. Spittoons should be invariably used, and every day the contents should be emptied into the fire and then rinsed with boiling water. All linen soiled should not be left to dry, but be plunged at once into boiling water. Sleeping with patient to be strictly forbidden, and after the decease the room should be thoroughly disinfected. M. Villemain recognized that the parasite of the malady can also be introduced by the food, milk, meat, add the blood of certain animals (cows, rabbits, fowl). The milk should be the object of special care on the part of the mothers and nurses (two thousand children die annually in Paris under two years from tuberculosis); it should be always boiled; the same need not be said of goats' or asses' milk, which is infinitely less dangerous. The meat should be rigorously inspected by the officers provided by the law. The habit of drinking fresh-drawn blood at the slaughter-houses (a habit much indulged in by the French for anemia) should be strongly condemned. Discussion of this important paper was, at its conclusion, deferred till next week.—*Medical Press*.